



NEWS

Caribbean Artwork at Gardens

"Paint by Mr. Amos Ferguson" is a delightfully different kind of exhibit for DBG.

A Bahamian artist, his images are childishly two-dimensional yet sophisticated in form and composition. Mr. Amos Ferguson depicts themes of flowers, animals and religion that are colorful and bursting with radiance.

The show hangs in John C. Mitchell II Hall, surrounded by the same or similar tropical foliage as the painter's subjects. The exhibit is open daily from 9 a.m. to 4:45 p.m. through Sunday, January 12 and there is no additional exhibit charge beyond the normal gate admission fee. Transportation of the paintings was generously provided by Continental Airlines.

Community Garden Space Available

Interested in vegetable gardening but don't have the space? The Gardens' community vegetable gardening program provides the space to garden (150 square-foot plots), educational opportunities and materials needed to start growing your own fresh produce.

A full-day workshop covering basic gardening techniques and providing participants with practical skills is scheduled for early spring. As a follow-up to this workshop, gardeners can utilize several handy resources throughout the summer. Staff is available to answer questions and provide assistance, and weekly seminars are scheduled to highlight timely cultural practices.

For many people, practical experience is the easiest way to



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*Mr. Amos
Ferguson's
"Pink Hibiscus
in Grey Bowl"*



Conservatory
banana *Musa*
acuminata cv.
'Dwarf
Cavendish'

Annual Meeting Scheduled

Mark your calendars now for the Gardens' Annual Meeting to be held Tuesday, February 4, 1986, in John C. Mitchell II Hall. Merle Moore, Executive Director, will present an illustrated program on his recent trip to the People's Republic of China. Details of the meeting will be mailed to all members in early January.

Gardeners Wanted

Denver Botanic Gardens is now taking applications for the 1986 seasonal gardening staff that may start as early as March. Some gardening experience and the ability to work outdoors all day under varying conditions are needed. Pay starts at \$5 an hour. Call DBG Receptionist Mary Jo Christenson at 575-3751 for an application.

Tributes

In memory of Margaret Dennis Bickham
Mr. & Mrs. William Collister

In memory of John Crawford
Jane Silverstein Ries

In memory of Robert Gast
James E. Stokes

In memory of Ida Quentin Mitchell
(for Lobby Court Fund)

Mrs. Howard Agee
Mr. & Mrs. George G. Barker
Ms. Mae B. Boettcher
Mrs. Fred P. Curtis
Mr. & Mrs. Gale E. Davis
Mr. & Mrs. John C. Davis, III
Mr. & Mrs. Richard M. Davis
The Fuller Foundation
Mrs. Mary Belle Grant
Ms. Patricia J. Harrington
Virginia H. (Ginny) Kelly
Mr. & Mrs. Frank A. Kemp
Ruth and Walter Koch
Mrs. Danforth Loring
Mrs. Donald H. Miller & Family
Mr. & Mrs. Charles C. Nicola
Mr. William F. Stevens

Treasures of Marnie's Pavilion

Throughout the Conservatory, from "forest floor" to "forest canopy," bromeliads and orchids can be discovered. Epiphytic plants are located hanging on the tallest plants, providing bright splashes of color, while terrestrial species are found growing at ground level.

Basically tropical in nature, the distribution of bromeliads ranges from sea level to 5,700 meters above sea level, from the most arid climates to the wettest rainforests and from sandy to rocky surfaces. Examples of all kinds can be located in the Conservatory.

Orchids, on the other hand, have a slightly broader distribution, ranging from temperate to tropical regions. Orchidaceae, an enormous family of plants with members located in such varied climates as Colorado and Southeast Asia, delights the debutante as well as the botanist.

A collection of members of the orchid and bromeliad families is maintained in Marnie's Pavilion to the west end of the Conservatory. Included in the collection, part of which is grown in the greenhouses directly below Marnie's Pavilion, are 1,200 species of bromeliads and 3,000 species of orchids. Although the greenhouses are closed to the public, visitors can appreciate the awesome beauty of the orchid and bromeliad flowers and foliage by viewing the display in the Pavilion.

Green Thumb News Number 86—1 January 1986

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than December 20 for February, January 20 for March and February 20 for April.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.



Accredited by the
American Association
of Museums

1986 Internship Program Announcement

Internships at Denver Botanic Gardens provide students opportunities to study botany and horticulture with a perspective different from the purely scientific approach of the university. Participation offers hands-on experience where students can strap on hip waders to study tropical waterlilies or where they create blowouts in gardens that resemble the Great Plains.

Beginning on June 16, this year's interns will work next to DBG's professional staff and volunteers to help maintain an urban, public-display garden. Until August 22 these students can expect to be introduced, in a work/learning format, to all departments of the Gardens.

Everyone will be involved in watering, weeding, planting and pruning; seeding, transplanting and propagating; and maintaining tropical, sub-tropical, perennial and annual plant displays. Each student will also work in the Helen Fowler Library, the Pauline A. and George R. Morrison Horticultural Demonstration Center (horticultural therapy and community gardening), and the Education Department. Classes, field trips and lectures will be provided throughout the 10 weeks.

A taxable \$2,000 stipend will be paid each intern. All applicants must have completed their sophomore year with a grade point average of 2.5 or higher on a scale of 4.0 and must be currently enrolled as either an undergraduate or graduate student. Applicants must also have completed several introductory courses in botany or horticulture to qualify.

Additional information and application forms can be obtained by calling the Education Department, 303-575-3751, or writing:

Patricia A. Pachuta
Education Director
Denver Botanic Gardens
909 York Street
Denver, CO 80206

All application materials are due March 1 and notification of appointment will be mailed by March 29.

A 1985 intern stated that this internship offered a unique "opportunity to identify true interests and reassess goals." It provides a situation where students can compare their skills to the professionals and develop expertise and confidence.

Gardens' Poster Contest

Professional artists—pay attention!

Denver Botanic Gardens will sponsor an art contest in conjunction with the annual plant and book sale. Professional artists are being encouraged to submit paintings with a botanical theme for judging by a selected jury.

All paintings will be exhibited and available for sale during an art show in late April. One painting will be selected as our 1986 publicity poster for this year's sale, the Festival of Plants and Books, scheduled for

May 9 and 10.

Entries must be received by February 17. Please do not send the painting; initial entries should be a transparency or color print. Send entries to Denver Botanic Gardens, Marketing Department, 909 York Street, Denver, CO 80206. Original art will be requested for final jury decision.

This year's poster will be distributed nationally and internationally through retail outlets. For further information call 575-3751, and ask for Diana Hunt.



Community
Gardens
Coordinator
Lynn Thompson

Community Garden

continued from page 1

learn and novice gardeners are encouraged to "dig right in." All basic materials are included in the \$30 fee—educational handouts, use of tools, soil amendments, water and a variety of popular bedding plants and seeds.

Gardening in a community setting provides participants with the opportunity to be exposed to a wide variety of horticultural techniques and be involved in the events that are generated by a community spirit. If you would like to participate in the 1986 community vegetable gardening program, call Lynn Thompson, Community Gardens Coordinator, at 575-3751, to register or obtain additional information. Space is limited so plan to register early.

Donations Needed from Philatelists and Bookworms

The Helen Fowler Library is collecting foreign stamps, uncanceled or used, for the annual plant and book sale scheduled for May 9 and 10. Please bring these to the library at your convenience. The book sale volunteers have already started sorting and classifying in preparation for this spring event and additional donations of books and stamps are desperately needed.

Please call Solange Gignac at 575-3751 to arrange to have the books picked up at your home. Donations are also accepted at the library.

Explore Herbalism Through "Peonies of Greece"

Among the many wildflowers that bloom each spring on Greek hills and mountains the largest and showiest is the peony. The Goulandris Natural History Museum at Kifissia, north of Athens, has organized an exceptional collection of lithographs, watercolors and illustrations from rare early and modern works, and historical information on this most beautiful of wildflowers.

By using the peony, the museum has traced the development of botanical illustration through the ages. The result, "The Peonies of Greece: Myth, Science, and Art," is a new exhibition currently being circulated by the Smithsonian Institution. Denver Botanic Gardens will host the show from February 8 through March 16, 1986.

The Goulandris Natural History Museum was founded in 1964 by Niki and Angelos Goulandris to instill in others the reverence they feel for the beauty and fragility of the natural world. A woman of many talents, Niki Goulandris received formal training in art from the age of 12 and has been painting flowers scientifically since 1958. Nature has always been her inspiration. "Wildflowers have the best balance and movement," she says. "They have a purity and natural elegance in the way they cling to a rock or move with a breeze. This quality is not to be found in cultivated plants. With peonies it reaches a pinnacle. I am very sensitive to the structure of plants, and I always paint from live, wild specimens."



*Paeonia
mascula* subsp.
mascula

Education Department Tree Walk at Fairmount Cemetery, Denver

Section I: Sunday, January 26

**Section II: Saturday, February 15
(one session)**

1:30 to 3:30 p.m.

Please indicate your section on the registration form.

During the summers of 1890 and 1891 over 4,000 trees including seven species of oak, sycamores, silver maples, Kentucky coffee trees, buckeyes, and several pines were all planted at Fairmount Cemetery. This is an opportunity to observe these as well as some more unusual trees such as scarlet oak and yellow buckeye. A walk through these mature, historic specimens will sharpen your identification skills.

Leader: Dr. William G. Gambill, Jr., Director Emeritus and Taxonomist at DBG, is a former botany and biology professor. His field trips and tree walks are very popular among our students.

Meet: at 1:30 p.m. in the parking lot just inside the entrance. Fairmount Cemetery is located at East Alameda and Quebec Streets in Denver.

Fee: \$5.50 members/\$6 non-members (includes \$3 for *Trail of Trees*, a 64-page illustrated tree guide to Fairmount Cemetery).

Limit: 18

Jungle Gems

**Saturdays, January 25, February 1, 8
(three sessions)**

10 a.m. to noon Classroom B

A wealth of unusual plants is native to the tropical regions of the world yet very few of them are grown by the average houseplant enthusiast. This course will introduce students to the major families of interesting tropical plants suited to home or greenhouse culture.

Lectures and demonstrations will be supplemented by hands-on greenhouse sessions to allow participants the opportunity to propagate their own "jungle gems" from the DBG collection.

Instructor: Gary Davis is a gardener florist at DBG whose responsibilities include the aroid and bromeliad collections. DBG Education Director Pat Pachuta is a horticulturist with many years of teaching experience.

Fee: \$24 members/\$26.50 non-members

Limit: 18

Know and Grow Orchids

Saturdays, February 8, 15, 22
(three sessions)
9 to 11 a.m. Classroom C

Discover the fantastic orchid family and their basic cultural requirements in this three-session course. Following an introduction to their natural and human history, participants will learn how to develop a good collection for their homes or greenhouses.

Fundamentals of soil media, watering and fertilizer will be covered through lectures and demonstrations. Each student will have the opportunity to take a division home following a hands-on dividing and repotting session.

Instructor: Botanist Horticulturist Larry Latta oversees the DBG greenhouse collections. An orchid hobbyist for 15 years, he has collected in the wilds of Ecuador, Venezuela and eastern Mexico.

Fee: \$24 members/\$26.50 non-members

Limit: 18

Rock Gardening for the Home Landscape

Thursdays, February 13, 20, 27
(three sessions)
7 to 9 p.m. Classroom B

Do you have a steep bank or a problem slope in your garden? A rock garden may be a colorful and interesting solution to such a problem spot. This three-part introduction to the art of rock gardening will demonstrate how various people have used naturalistic landscaping to solve difficult garden problems.

In the first session, a short history of the art of rock gardening in China, Japan and the West will be illustrated with slides, and the aesthetics of rock plant placement will be analyzed.

The second meeting will include a workshop on rock placement where class members will construct miniature replicas of rock gardens with sand and pebbles.

Finally, a review of the most widely available plant materials and a discussion of the proper selection of plant materials for actual garden needs will conclude the course.

Instructor: Panayoti Kelaidis is curator of the award-winning Rock Alpine Garden at DBG and is also an enthusiastic teacher.

Fee: \$24 members/\$26.50 non-members



Moth orchid
Phalaenopsis
'Heavenly
Monarch x
Mattie Shave'

Perennial Pleasures

Tuesdays, January 28, February 4,
11, 18, 25
(five sessions)
7 to 9 p.m. Classroom C

With proper planning and planting, perennials can enhance any garden with long-term beauty and reduced maintenance. Discover the pleasures of perennial gardening in this five-week course that covers garden design, soil preparation and cultivation as well as a multitude of suggested plants.

Perennials for specialized situations, such as shady areas, will also be discussed. There will be ample opportunity for questions.

Instructor: Andrew Pierce is a horticulturist and is assistant director of DBG. He is an accomplished grower of perennials and alpine plants.

Fee: \$40 members/\$44 non-members

Limit: 18

Birds of Colorado and Their Plant Associations

Saturday, February 8
8:30 a.m. to 12:30 p.m.
(one session) DBG House

What different plants do ptarmigan and sage grouse feed on? Where do yellow warblers nest? Why are red crossbills found frequently one year and then not seen the next? Participants of this one-day course will learn the various Colorado life zones from plains to tundra as well as why food and nesting requirements limit different bird species to specific elevations and habitats.

Instructor: Tina Jones

Fee: \$16 members/\$17.50 non-members

CLASSES

Winter
1986
Denver Botanic Gardens



Winter Ecology: Plants and Animal Evidence at Chatfield Arboretum

(one session)

Sunday, February 2
9 a.m. to 2 p.m.

How do conifers and deciduous trees survive the winter? Would you like to see vole tunnels and their teeth marks in the bark of cottonwood trees? Students in this one-day field session will learn how to spot animal tracks and dens, some winter botany, plus identification of wintering birds. A visit to Chatfield Reservoir will be included for specific additional denning evidence.

Meet: at 9 a.m. in the schoolhouse parking lot of Chatfield Arboretum. The Arboretum is located less than ½ mile to the west on Deer Creek Road just off Highway 75 (County Line Road). Please be prompt and dress in warm clothing including walking shoes for snow. Don't forget your lunch and binoculars.

Instructor: Tina Jones is a wildlife instructor who teaches at the University of Colorado and the Denver Museum of Natural History as well as DBG. She has many years of field experience.

Fee: \$7.50 members/\$8.25 non-members **Limit:** 20

Planting Design for Homeowners

Mondays, February 10, 17
from 7 to 9 p.m.

Saturday, February 15
from 1 to 5 p.m.

(three sessions) Classroom B

The plantings in your home landscape should suit your neighborhood, your particular site, and the wishes and desires of your family. The following topics will be covered in this class: development of design objectives, site analysis, categories of plants and their uses, elements and principles of design, special Colorado conditions, technical planting and maintenance, plant acquisition and landscape construction.

Alternative and support materials (stone, water, screens, etc.) and common solutions will also be included. The course will consist of a slide lecture, discussion, demonstrations and information about local resources.

Instructor: Jan Caniglia, M.A., Landscape Architect, has practiced community design, environmental planning and residential and commercial design for seven years. She has taught numerous courses in landscape design.

Fee: \$32 members/\$35 non-members

Watercolor and Mixed Media Painting

Saturdays, January 25, February 1, 8, 15, 22, March 1

(six sessions)

1 to 3 p.m. Classroom B

Translate your vision of nature into exciting color! Wet-in-wet techniques as well as painting on dry paper will be demonstrated. From quick gestures to slow contemplative studies, students will explore the rich world of nature at Denver Botanic Gardens. Instruction and demonstrations in assorted media, including pastels, will be provided.

Instructor: Oksana Ross, Ph.D., studied at New York University and Columbia University and has 32 years of teaching experience. She was formerly on the faculty of the University of Colorado at Denver, Metropolitan State College, and Colorado Women's College.

Fee: \$48 members/\$53 non-members

Limit: 20

Botanical Illustration II

Tuesdays, February 11, 18, 25,
March 4, 11, 18

(six sessions)

9:30 to 11:30 a.m. Classroom B

Cold winter mornings are an ideal time to get acquainted with some of the exotic plants in our collections.

Previous drawing experience is necessary to enroll in this course which will stress accurate drawing of flowers, stems, roots and leaves. Fresh plant material will be used and will be dissected when necessary to draw individual plant parts.

Students work with pencils, pen and ink, and finally progress to watercolors. Please bring several sharp drawing pencils and an eraser to the first meeting.

Instructor: Angela Overy received her National Diploma of Design from London University, England, and designed in London, New York and San Francisco before settling in Denver. Over the years, many DBG students have found a new interest and ability in her enthusiastic classes and lectures.

Fee: \$48 members/\$53 non-members

Limit: 20

(Please note that a Beginning Botanical Illustration course will meet for four weeks this spring ; students will use spring flowers as subjects for notecards.)



Community
Vegetable
Gardener
Charles
Jumonville

Intensive Techniques for Growing Vegetables

Wednesdays, February 5, 12, 19, 26
(four sessions)

7 to 9 p.m. DBG's Morrison Center

Grow more vegetables in a smaller space and use less energy doing it. This course will explain garden design, soil preparation, variety selection, maintenance, specific culture of common vegetables and potential problems with pests and

diseases. Emphasis on intensive gardening methods such as wide-row planting, intercropping and companion planting will maximize your harvest and save you work.

Instructor: Lynn Thompson is a horticulturist who coordinates DBG's Community Vegetable Gardening Program. She has taught many classes on topics pertaining to home vegetable gardening in Colorado.

Fee: \$32 members/\$35 non-members

Appalachian Basketry Techniques

Tuesdays, February 11, 18, 25 (skip March 4), March 11, 18

Section I: 12:30 to 4 p.m. except February 11 when the class meets until 4:30 p.m.

Section II: 6:30 to 10 p.m. except February 11 when the class begins at 6 p.m.

(five sessions)

DBG's Morrison Center

Please indicate your section on the registration form.

Learn the traditional Appalachian egg basket and some of its variations. The gracefully-shaped



baskets originated in Scotland and came to America with the Highland settlers. Students will learn this rib and split technique in a variety of shapes and can expect to complete one basket each session.

Please bring a towel and clippers (or pruning shears).

Instructor: Robin Taylor Daugherty is a fiber artist with considerable teaching experience; she has taught weaving, spinning, felting, tapestry-making, and basketry throughout Colorado and her work is exhibited widely.

Fee: \$95 members/\$105 non-members (includes \$35 for the construction of five baskets).

Limit: 10



*Wicker Basket
by Pat Pachuta*

Wicker Basketry Techniques

Thursdays, February 13, 20, 27 (skip March 6), March 13, 20

Section I: 12:30 to 4 p.m. except February 13 when the class meets until 4:30 p.m.

Section II: 6:30 to 10 p.m. except February 13 when the class begins at 6 p.m.

(five sessions)

DBG's Morrison Center

Please indicate your section on the registration form.

Wicker basketry is a technique of weaving that usually employs reed, willow, or rattan. Students in this course will use reed to make a variety of baskets in oval and round shapes and can expect to complete one basket each class session.

Please bring a towel, clippers (or pruning shears) and an awl.

Instructor: Robin Taylor Daugherty

Fee: \$95 members/\$105 non-members (includes a \$35 materials fee for the construction of five baskets).

Limit: 10

Basketry Workshop: Shaker Cheese Basket

(one session)

Section I: Monday, February 17
Section II: Saturday, February 22
9 a.m. to 5 p.m. DBG's Morrison Center

Please indicate your section on the registration form.

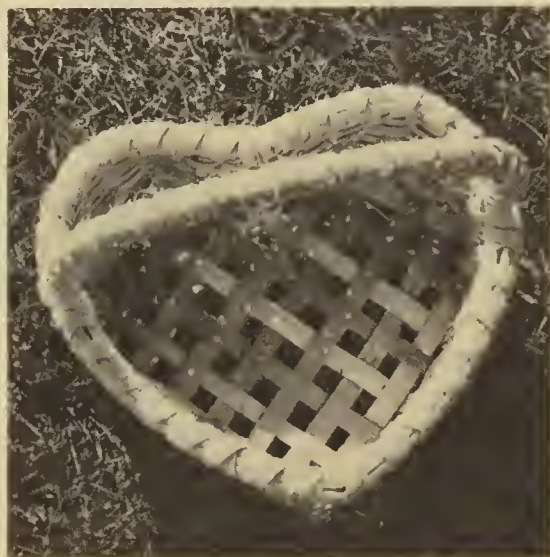
The Shakers used and sold these lacy baskets for draining and carrying cheeses. The open hexagonal weave makes a lightweight basket that is equally decorative serving rolls or hanging on your wall.

Please bring a towel, clippers (or pruning shears), awl, spring-type clothespins, tape measure and a sack lunch.

Instructor: Robin Taylor Daugherty

Fee: \$28 members/\$31 non-members (includes \$8 for materials).

Limit: 10



*Appalachian
Egg Basket by
Robin Taylor
Daugherty*

*Heart-Shaped
basket by
Robin Taylor
Daugherty*

Basketry Workshop: Heart-Shaped Basket

(one session)

Section I: Friday, February 7
Section II: Saturday, February 8
9 a.m. to 5 p.m. DBG's Morrison Center

Students in this class will create a traditional Appalachian heart-shaped basket. Using flat reed, they will weave an 8-inch by 5-inch basket using the square to round technique. This basket can be made with a relatively open or closed base and an optional handle.

Please bring a sack lunch, pruning shears, a sharp knife, and a towel to class.

Instructor: Robin Taylor Daugherty.

Fee: \$28 members/\$31 non-members (includes \$8 for materials)

Limit: 10

*Shaker Cheese
Basket by
Robin Taylor
Daugherty*



spots for kids

Animal Crackers

Saturday, January 11
(one session) Classroom A
Section I: For children of ages 5-7
10 a.m. to noon
Section II: For children of ages 8-11
1 to 3 p.m.

Please indicate your section on the registration form.

Take a walk in our jungle and find out how some plants get their names. See the apple that belongs to the monkeys, the palm named for part of a fish and the plant whose flower is so beautiful it must be the bird of paradise. Find out why some plants are named for fiddles, powderpuffs or snowflakes. Learn how to bake animal crackers and enter the create-a-plant contest.

Instructor: Jo Duranceau Cannon studied art at the University of Washington and the University of Denver and has extensive teaching experience with children.

Fee: \$6.50 members/\$7 non-members
Limit: 12

Winter Songs

Saturdays, January 18, 25
(two sessions) Classroom A
Section I: For children of ages 5-7
10 a.m. to noon
Section II: For children of ages 8-11
1 to 3 p.m.

Please indicate your section on the registration form.

Tour the Gardens and learn how trees and plants sleep through Old Man Winter's cold. See the dormant buds of trees and discover the small flowers waiting inside bulbs. Listen to the sounds of winter's whisper. Create wind chimes to sing the song of winter in your own garden.

Instructor: Jo Duranceau Cannon
Fee: \$13 members/\$14 non-members
Limit: 12

The Crocodile's Smile

Saturday, February 1
(one session) Classroom A
For children of ages 5-7
Section I: 10 a.m. to noon
Section II: 1 to 3 p.m.

Please indicate your section on the registration form.

Who do you see in the Gardens' jungle? Create the creatures that are floating, flying, and slithering through their jungle home. Visit the Conservatory and discover how to paint or draw lines that are straight for the lurking, smiling crocodile, curved for the long and swinging tail of the monkey, and smooth for the tiger's stripes.

Use glowing colors for jungle flowers and learn new ways to use pastels and watercolors. Listen to jungle sounds and stories.

Instructor: Jo Duranceau Cannon
Fee: \$6.50 members/\$7 non-members
Limit: 12

Petals from Parnassus

Saturday, February 8
(one session) Classroom A
Section I: For children of ages 5-7
10 a.m. to noon
Section II: For children of ages 8-11
1 to 3 p.m.

Please indicate your section on the registration form.

On top of Mount Parnassus in a gleaming palace with 12 chairs live Greek gods and goddesses. Explore mythology and learn the tales of how Persephone returns to earth each spring to bring us wildflowers and how Pluto gave the peony its name.

Visit the Smithsonian Institution's exhibit, "Peonies of Greece," and find out why the "queen of flowers" can be either magic or medicine.

Instructor: Jo Duranceau Cannon
Fee: \$6.50 members/\$7 non-members
Limit: 12

Dragons and Unicorns

Sunday, February 2; 1 to 3 p.m.
(one session) Classroom A
For children of ages 8-11

Tour the Gardens and discover the magical world of plants in medieval forests and courtyards. Find out what plants and herbs were used for sorcerer's brews. Make your own knight's armor or concoct a magic potion of flowers and herbs.

Instructor: Jo Duranceau Cannon
Fee: \$6.50 members/\$7 non-members
Limit: 12

Hearts and Flowers

(one session) Classroom A
Section I: For children of ages 5-7
Thursday, February 13
3:30 to 5:30 p.m.
Section II: For children of ages 8-11
Friday, February 14
3:30 to 5:30 p.m.

Please indicate your section on the registration form.

The pioneers of the Plains made their valentine greetings from flowers, buttons, and lace. Create your own old-fashioned valentine and make a cupid with a moveable bow so his arrow can fly. Design a series of pop-up hearts. Use a quill pen to compose a valentine rhyme and learn the legends of St. Valentine's Day. Tour the Gardens to discover the lore and language of flowers.

Instructor: Jo Duranceau Cannon
Fee: \$6.50 members/\$7 non-members
Limit: 12

©1986
Jo Duranceau Cannon

Denver Botanic Gardens
909 York Street
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

Registration Form for Classes and Field Trips

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Address _____

City _____ State _____ Zip _____

Home Tel. No. _____ Business Tel. No. _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No

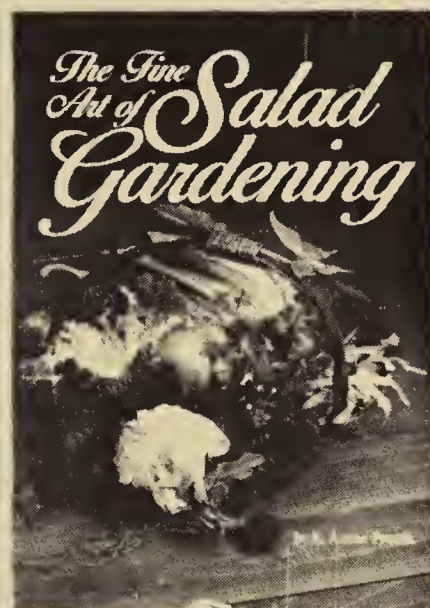
Helen Fowler Library
Volume 8, No. 6
January 1986
Guest Editor,
1985 Summer Intern
Becky Thayer
E
Librarian:
Solange Gignac

The Fine Art of Salad Gardening

By E. Annie Proulx. Rodale Press, Emmaus, Pa., 1985. SB 321 P72 1985.

I am the type of salad gardener who has a few patches of two or three varieties of lettuce. Every year I am sure it will not germinate, only to find that by June I am buried in enough leafy greens to support a rabbit farm. Then follows the task of trying to use all that I have grown, and let's face it, there are a limited number of things you can do with lettuce. Salad gardening has always been a part of my garden but never the most exciting. So upon being presented with this book, I was less than enthusiastic about an entire volume on lettuce.

How I underestimated the author!
The Fine Art of Salad Gardening

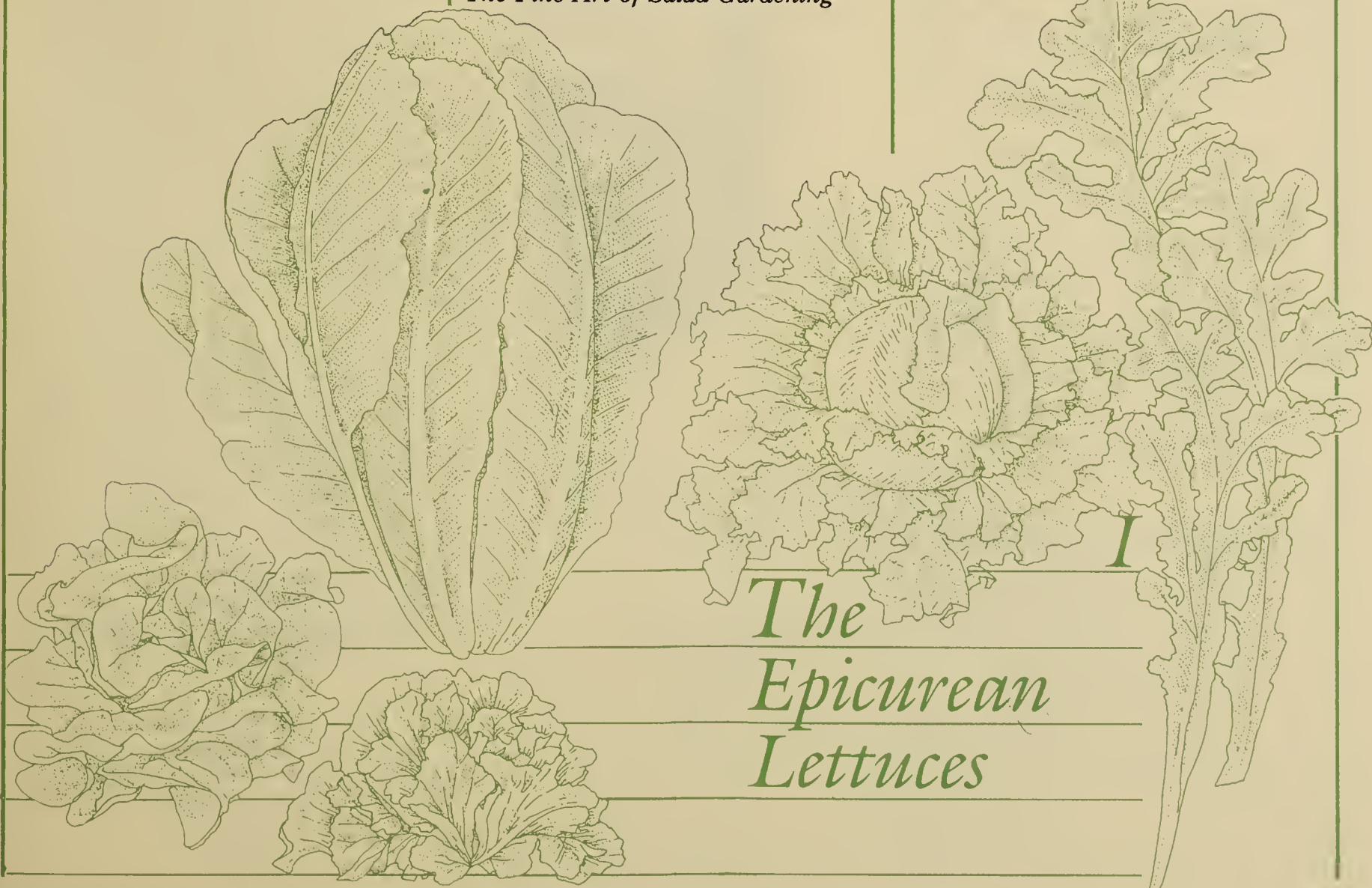


THE REVIEWERS

Dorothy Dron-Smith—
1985 Summer Intern

Jennifer Lorang—1985 Summer Intern

Lynn Thompson—DBG
Community Gardens Coordinator



makes the traditional salad of lettuce and tomatoes seem archaic. Presented is an endless selection of lettuces, endives, herbs, flowers, Asian vegetables and greens that can be grown and combined to form salad entrees rather than side dishes. By the time you finish reading the book you will no longer think of salads as only green but will also visualize blue borage flowers, golden nasturtiums, red radicchio or white witloof.

Can all of these grow in Colorado? Many of them can and the author provides reliable cultural information from which one can experiment. Several that are known to grow successfully are corn salad, rocket, endive, salad burnet, sorrel, Swiss chard, garden cress, rape salad, amaranth, chicory, mustard greens and head or romaine lettuces. You may even want to try the author's recommendation for growing ginger in your home and harvesting the stalks and flowers.

If you are concerned with how you are going to prepare all these wonderful new salad ingredients, do not despair. The author provides enough recipes to get started. From there you are only limited by your tastebuds and your creative energies. *The Fine Art of Salad Gardening* is a wonderful collection of greens, vegetables, herbs and flowers that many gardeners grow but few consider to be salad makings. This book will inspire you to approach your salad garden in an entirely new light—with a sense of adventure.

Lynn Thompson

Bottle Gardening

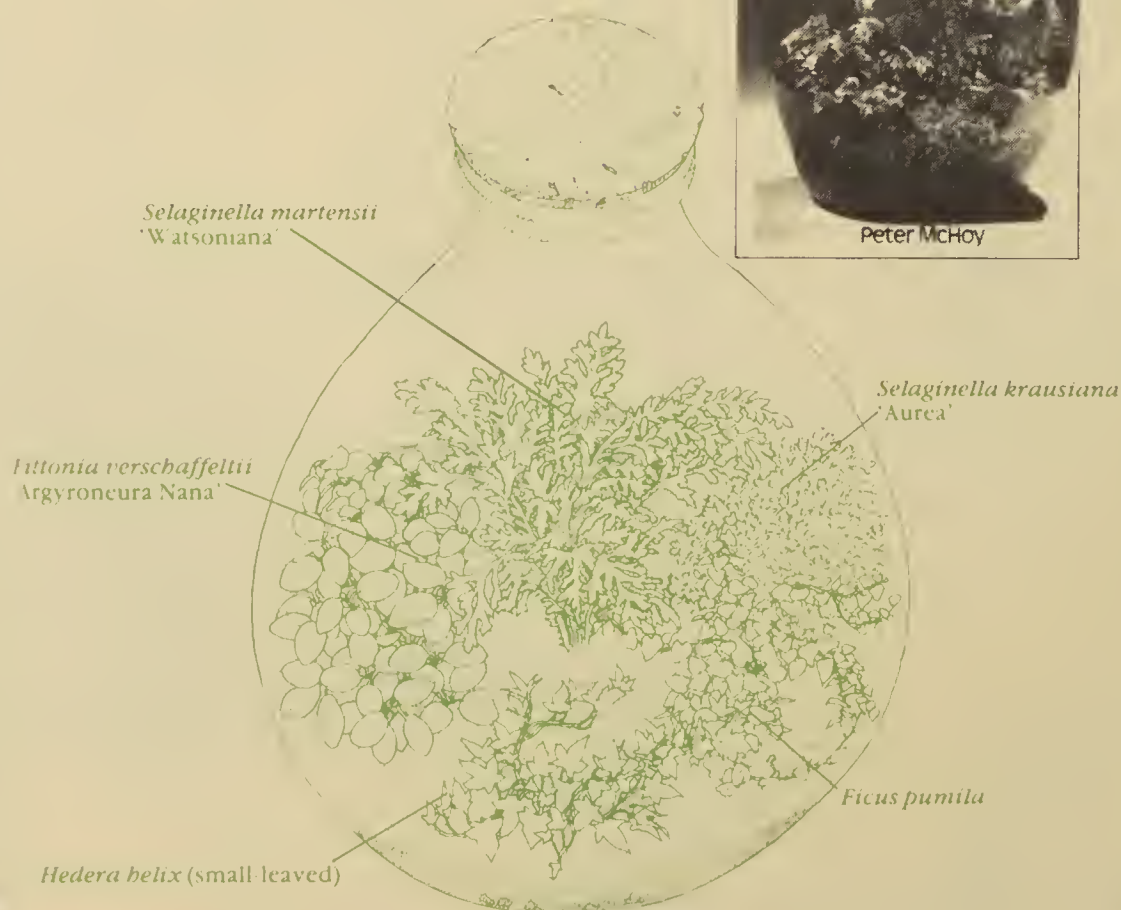
By Peter McHoy. Blandford Press, Poole, Dorset, 1985. \$6.95. SB 417 M35 1985.

Bottle gardening provides a great hobby for old gardeners looking for new twists as well as new gardeners and Peter McHoy's *Bottle Gardening* furnishes a complete account of how to get a bottle garden started and more.

McHoy begins with an interesting history of bottle gardens and their practical uses. He continues by describing potential containers from fruit jars and wine bottles to fish bowls and carboys. He even includes informative step-by-step instructions and diagrams for building your own terrarium. Recommendations for the right plants to use in different containers are made as well as proper care for these plants: light, temperature, soil, watering, pruning, shaping and fertilizing. A section on special problems such as pests and diseases is added. Finally, the techniques are discussed for propagating new bottle-garden plants.

This 93-page book contains several beautiful color photographs of bottle gardens and 18 diagrams of projects you can try yourself. Peter McHoy's book is a great place to start for any gardener who feels like taking to bottle gardening.

Jennifer Lorang



Gardening Techniques

By Lee Foster and illustrated by April Funke. Ortho Books, San Francisco, 1984. \$9.95. SB 453 F67 1984.

Ortho Books has a new book similar in format and style to other Ortho gardening books. This particular book covers 10 different aspects of gardening separated by chapters. The subjects range from managing soils to insect and disease controls. Each subject is thoroughly covered through the use of illustrations and text. An experienced gardener may find the explanations too basic, but the beginning gardener will benefit from the complete explanation.

A very helpful facet of the book is that all the horticultural terminology presented is italicized, followed by an explanation of the term. This will be very useful for anyone not familiar with horticultural jargon. The definitions are correct, for example, "A runner is a horizontal stem that arises from a crown bud and grows laterally." There is also a glossary of horticultural terms in the back of the book.

This is a nicely illustrated book with drawings and photographs. Several different drawings are used to illustrate, from start to finish, a gardening technique. These are well done and informative. However, the book lacks good drawings on insects, weeds and diseases. I felt that the drawings presented here were too general and could not be used for identification purposes. Photographs would have been much more useful in these sections on pests.

I would recommend *Gardening Techniques* to the beginning gardener as a good overall reference book. It will be a helpful addition to any gardening library.

Dorothy Dron-Smith



Growing plants for holiday sales in the Northern Hemisphere is an upside-down business, much better suited to Australia, since most major holidays, for which floral products are a major part of the observance, occur either during or immediately following the coldest periods of the year. Even the costs for spring vegetable transplants strongly reflect the expenses accrued by the grower for fuel costs during the winter or cold spring months.

Although commercial growers exerted a strong influence on the creation of new plant-oriented holidays during the warm, plant-growing, but otherwise slack season (Secretary's Day, Grandparents' Day), they are powerless to change existing holidays or the price of fuel used to grow crops for these holidays. Instead, they have influenced our choice of gift plants by making alternative plants, which can be grown at cooler temperatures, increasingly available thus recouping some of their fuel costs.

Similarly, hobby greenhouse growers, who are feeling the same pinch of ever-increasing energy costs, can follow suit and fill their winter growing spaces with low energy-consuming plants.

Many hobby greenhouses present an enigmatic problem when they are expected to act as both growing spaces and solar collectors. Generally, a well-constructed, efficient solar collector is totally unheated and is expected to collect and trap as much heat as possible for transfer to living spaces. The

diurnal fluctuation in temperature from daytime collection temperatures to nighttime, potentially subfreezing, temperatures can create an impossible environment for most plants.

Anemone coronaria (anemone, poppy anemone, lily-of-the-field) These perennials of the buttercup family have solitary flowers on stems 10-18 inches long. Shades of blue, red, pink, lavender and white are available in single, semidouble and fully double forms with flowers as wide as 2¾ inches.

A temperature of 60 F is critical for germination since higher temperatures adversely affect the seed. Minimum temperatures of 40-45 F are satisfactory for good growth.

Primula vulgaris, *P. x polyantha* (primrose) This is another classic gaining in popularity due to both the increase in number of colorful cultivars now available and its ability to flourish at low temperatures.

Seeds should be surface sown and germinated at 60-70 F. Higher temperatures severely inhibit germination. In six to eight weeks they may be transplanted to two-inch pots and then best grown at only 41-45 F with continual shade to prevent leaf scorch.

Since the roots are subject to rot when overwatered, they generally are grown on the dry side. When three to four flower buds are visible they can be forced into quicker bloom by raising the temperature to 55 F for two to four weeks.

Schlumbergera truncata (Christmas and Thanksgiving cactus) These plants were formerly

known as *Epiphyllum truncatum* or *Zygocactus truncatus*. Information regarding their culture, especially blooming characteristics, has been under relatively recent review. Several methods are now available to flower the various cultivars of these cacti at any time of the year, including the cool greenhouse.

These cacti will begin to set flower buds naturally when the daylength becomes shorter than 9½-10 hours (mid-November for Denver) and when day temperatures are not allowed to rise above 77 F. If for a period of six weeks night temperatures can be kept below 60 F, they will flower anytime of the year provided that day temperatures do not exceed 77 F.

Should there be any extraneous light at night (e.g. street lights or interior house lamps) and prevailing temperatures are above 60 F day or night, the plants may fail to bloom. Although the optimum night temperature is 60 F, temperatures as low as 55-56 F can be tolerated with no more harm than slowing the bloom process. Night temperatures below 50 F will prevent blooming and daytime temperatures above 77 F will result in aborted buds.

This is only a small sample of what can be grown in a "cool" winter greenhouse. In addition, almost all early spring-blooming perennials could be brought into bloom indoors by potting them in late summer and plunging them outdoors until mid-January or February when they could be brought into the greenhouse and forced at 40-45 F night temperatures.

Jim Borland
Plant Propagator
at Denver Botanic Gardens

C A L E N D A R JAN

Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

African Violet Society, 4th Thurs. of 7 months; Bonsai Society, 1st & 3rd Tues.; Cactus & Succulent Society, 2nd Tues.; Civic Garden Club, 1st Fri.; Colorado Native Plant Society, 4th Wed.; Dahlia Society, 2nd Fri.; Gladiolus Society, call for info.; Gloxinia Gesneriad Growers, 1st Sat.; Hemerocallis Society, 3rd Sun. of 4 months; Ikebana International, 4th Fri.; Indoor Light Gardening Society, 3rd Thurs.; Iris Society, spring & fall dates; Men's Garden Club, 4th Thurs.; Mycological Society, 2nd Mon.; Orchid Society, 1st Tues.; Rock Garden Society, 3rd Wed.; Rose Society, 2nd Thurs.; Ultra Violet Club, 4th Mon.; Water Garden Society, 2nd Sun. of 5 months

Happy New Year

S	M	T	W	T	F	S
			1 New Year's Day Gardens closed all day	2 January 2-12 Paint by Mr. Amos Ferguson	3	4
5	6	7	8	9	10	11 Animal Crackers
12	13	14	15	16	17	18 Winter Songs
19	20	21	22 Guides' Tea	23	24	25 Jungle Gems, Watercolor and Mixed Media Painting
26 Tree Walk at Fairmount Cemetery	27	28 Perennial Pleasures	29	30	31	

Coming Next Month

February 1 The Crocodile's Smile	February 4 Members' Annual Meeting	February 7 Heart-Shaped Basket	February 8-March 16 "Peonies of Greece"	February 11 Botanical Illustration II, Appalachian Basketry	February 14 Hearts and Flowers	February 17 Shaker Cheese Basket
February 2 Winter Ecology, Dragons and Unicorns	February 5 Intensive Vegetable Culture	February 8 Birds & Plants of Colo., Heart-Shaped Basket, Know and Grow Orchids, Petals from Parnassus	February 10 Planting Design	February 13 Rock Gardening, Wicker Basketry, Hearts and Flowers	February 15 Tree Walk at Fairmount Cemetery	February 22 Shaker Cheese Basket

Denver Botanic Gardens, Inc.
909 York Street
Denver, Colorado 80206
303-575-3751

January 1986

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Denver Botanic Gardens

February 1986

Number 86-2



NEW S

Paeonies of Greece Donated—Smithsonian Exhibit Provides Interpretation

*Paeonia
peregrina*



Inside:

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Home Show*
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page 4

*Children's
program*
page 6

Mr. Anthony G. Andrikopoulos of Cheyenne, Wyoming, has generously donated a limited edition portfolio of spectacular botanical prints to Denver Botanic Gardens. The contemporary portfolio, *Paeonies of Greece*, consists of 12 framed lithographs of peonies and is accompanied by a profusely illustrated commentary volume, *Peonies of Greece, a Taxonomic and Historical Survey of the Genus Paeonia in Greece* by William T. Stearn and Peter H. Davis.

The gift is in memory of Margaret Elizabeth Roman Andrikopoulos, an avid and skillful gardener with a special fondness for peonies. After viewing the Smithsonian Institution's traveling exhibit "Peonies of Greece: Myth, Science, and Art," at the American Museum of Natural History in New York, Mr. Andrikopoulos was moved to donate a copy of the portfolio to Denver Botanic Gardens. It was subsequently decided to host the Smithsonian show, whose focal point is the series of botanical lithographs from *Paeonies of Greece*, to coincide with the presentation of our own set.

Denver Botanic Gardens will host "The Peonies of Greece: Myth, Science, and Art" including the 12 framed lithographs from Mr. Andrikopoulos in John C. Mitchell II Hall from February 8 through March 16, 1986.

Among the loveliest of wild-flowers, peonies have been prized all over the world for thousands of years. In China, poetry and texts of the last 1,400 years praised the tree
continued on page 3

Great Getaways— Italy, Switzerland and Austria June 7 to July 1

Denver Botanic Gardens is sponsoring a once-in-a-lifetime tour to Italy, Switzerland and Austria this summer. This trip will combine gardens, art and folklore of the regions visited. Panayoti Kelaidis, curator of our Rock Alpine Garden and Edward Connors, president of our Board, will combine their expertise to bring together the flowers and art of the places visited. On this trip participants will wander over the high country and see several gardens not open to the public as well as roam through several private villas and galleries. Ample free time will be available to those not totally involved with either art or horticulture.

The trip will start in the lake country of Italy, visiting the more formal gardens there as well as two gardens which are private. We will then travel to the Alps investigating five separate ecosystems, each having their own special plants and scenery while picnicking along the way. Grindelwald and Pontresina will be our bases for seven days in Switzerland, while Innsbruck will be our headquarters in Austria. A visit will be made to Garmisch-Partenkirchen in Bavaria to see the castles of Mad Ludwig.

Using Asolo as a base, we will visit several Palladian villas and gardens in the area. Again, several of these are private and not seen by the public, but we will get a good feel for the Renaissance of the Venetian nobility. On our way to Florence we will see the art and visit the Botanic Gardens of Padua, the first in the Western world. With Florence as a base we will view the art and special gardens of Collodi and Lucca. The trip will end with a fine visit of Milan and Pavia.

The price for this special three-week trip will be \$3,750, which includes a \$200 contribution to Denver Botanic Gardens. This price will include all trip expenses: lodging, round-trip transportation from Denver and meals. Come see Villa Melzi and Isola Madre, the Thyssen Bornamiza collection, the Schynige Platte, Spiez Castle, the Swiss National Park in North Engadine, Choira Castle, Palazzo Colleoni, Villa Maser, the Garden of Valsanzibio and Villa Torrigiani to name a few. The trip is limited to 20, so call Andrew Pierce, assistant director at DBG, at 575-3751, if interested.

Volunteer Dick Schwendinger (center) with two former interns, Karin Dafoe and Neil Snow



Annual Members' Meeting February 4

DBG members have already received an announcement of the Annual Membership Meeting scheduled for Tuesday, February 4 in John C. Mitchell II Hall at 7:30 p.m. Following the business meeting Executive Director Merle M. Moore will present an illustrated program on his recent trip to the People's Republic of China.

If you haven't already made reservations, you may call the Development Office at 355-3456 to do so.

Tributes

In honor of Dr. & Mrs. William C. Jackson, Jr.

John & Ann Chafee

In memory of Mrs. Gerald D. Bachar

Mr. & Mrs. Donald C. Campbell

In memory of Dr. George A. Filmer

Bill & Berta Anderson

In memory of Dave Franzen

Herbert & Beatrice Jones

In memory of Bertha Hennessy

Emma A. Andreen
Arvada Garden Club
Virginia M. Fletcher
Inez Johnson
Bessie A. Kinkel
Eldora LaRocque
Annie D. Roeder
Colletta A. Sexton

In memory of Louise Light

Mr. & Mrs. Robert S. Appel

In memory of Ida Quentin Mitchell

Mr. & Mrs. William E. Bradford
Mr. & Mrs. John Stoddart, Jr.

In memory of Charles Earl Mitton

Harlan & Darlene Holben

In memory of John Pounder

Herbert & Beatrice Jones

In memory of Bill Samuels

Mr. & Mrs. Robert S. Appel

In memory of Stephanie M. Traina

Susan Fralick & Hank Rutter

In memory of Margaret White

Herbert & Beatrice Jones

1986 Internship Announcement Reminder

Members are reminded that applications for the 1986 college internship program in "applied horticulture" are due March 1, 1986. This 10-week program provides students the opportunity to gain hands-on experience in botany and horticulture.

Additional information and application forms can be obtained by calling the Education Department, 303-575-3751, or writing:

Patricia A. Pachuta
Education Director
Denver Botanic Gardens
909 York Street
Denver, CO 80206

Green Thumb News Number 86—2 February 1986

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than January 20 for March, February 20 for April and March 20 for May.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.



Accredited by the
American Association
of Museums

Paeonies of Greece

continued from page 1

peony as the "King of Flowers." Western cultures have venerated the peony even longer and it was known as the "Queen of all Flowers" by the ancient Greeks who recorded its medicinal properties. References to the peony can be found in the oldest herbals and illustrations date from the *Dioscorides Codex*.

The Greek botanical artist, Niki Goulandris, portrayed the plants in life-size watercolor paintings using specimens gathered in the remote hills and mountains of Greece. Her meticulous craftsmanship and emphasis on realism has ensured not only aesthetic quality, but also scientific accuracy.

The lithographs were prepared by another Greek artist Takis Katsoulidis. Master lithographer Katsoulidis was trained at the *Ecole des Beaux Arts* in Paris. Using a method developed in France in the 18th century, he has separated the colors by eye alone and has used as many as 15 on each plate. The colors of the lithographs are so perfectly balanced that it is difficult to distinguish between them and the original watercolors. Also traveling with the exhibition are two of the original paintings by Mrs. Goulandris.

The framework of the exhibition consists of panels which describe the peony in Greek mythology, the deterioration of art during the middle ages and the subsequent development of botanical illustration through the 16th, 17th and 18th centuries. Information on the cultivation and distribution of the peony is also included.

"The Peonies of Greece: Myth, Science, and Art" will be highlighted by examples of early herbals from the Waring Rare Book Room of the Helen Fowler Library at Denver Botanic Gardens.

In addition, commemorative posters depicting one of the peonies will be sold during the exhibition. There will be no exhibit fee other than the regular non-member gate admission fee and members with guest privileges are encouraged to take this opportunity to introduce others to the Gardens.

Like the Smithsonian Institution's "Native Harvests: Plants in American Indian Life" which DBG hosted in the winter of 1985, this exhibit is supported by a major gift from the Bonfils-Stanton Foundation. We are deeply indebted to the Bonfils-Stanton Foundation for its continuing support of Denver Botanic Gardens' traveling exhibit program.

27th Annual Garden and Home Show

Every year this "spring" event excites Denver even though it is still winter outside. This year's extravaganza is imaginative with an exotic international theme of birds, plants and gardens.

Towering above the many gardens will be a large netted Bird World. This sanctuary from the Denver Zoo will be complemented by two dozen gardens that will reflect the international theme of the show.

Below the main floor in the newly created Horticulture Hall will be a combination of many facets of Colorado's horticultural industry in an educational, but decorative



setting. Denver Botanic Gardens will be there along with Colorado's groundhog.

The show runs from Friday, January 31 until Sunday, February 9 in Currigan Hall, 14th and Champa Streets. Opening night hours are 7 to 10 p.m., Sunday hours are noon to 6 p.m. while the doors will be open from noon to 10 p.m. Monday through Saturday. Adult admission is \$3.50, children from 6 to 12 are only \$1.50 and younger children are free.

Drop by "Gardens and Birds Around the World" and enjoy the welcome gift of an early glimpse into spring.

Recycle Your Books

Proceeds from DBG's annual book sale turn used books into new books for the Helen Fowler Library. Each year the library receives donations of used books and volunteers in turn prepare them for the spring sale, a process that takes place 52 weeks a year. Books are currently being sorted and classified in preparation for the sale scheduled for May 9 and 10.

Bring your books in now or call Librarian Solange Gignac at 575-3751 to arrange for a home pick-up. Your generosity will enable the library to continue building and developing the most thorough collection of botanical and horticultural information found in Colorado.

Gardeners Wanted

Applications are currently being accepted at Denver Botanic Gardens for the 1986 seasonal gardening staff. These positions may begin as early as March. We are looking for individuals with some gardening experience and the ability to work outdoors all day under varying conditions. Pay starts at \$5 an hour. Call DBG Receptionist Mary Jo Christenson at 575-3751 for an application.



Education Department Appalachian Basketry Techniques

Tuesdays, February 11, 18, 25 (skip March 4), March 11, 18
Section I: 12:30 to 4 p.m. except February 11 when the class meets until 4:30 p.m.
Section II: 6:30 to 10 p.m. except February 11 when the class begins at 6 p.m.
(five sessions)

DBG's Morrison Center

Please indicate your section on the registration form.

Please bring a towel and clippers (or pruning shears).

Instructor: Robin Taylor Daugherty is a fiber artist with considerable teaching experience; she has taught weaving, spinning, felting, tapestry-making, and basketry throughout Colorado and her work is exhibited widely.

Fee: \$95 members/\$105 non-members (includes \$35 for the construction of five baskets).

Wicker Basketry Techniques

Thursdays, February 13, 20, 27 (skip March 6), March 13, 20
Section I: 12:30 to 4 p.m. except February 13 when the class meets until 4:30 p.m.
Section II: 6:30 to 10 p.m. except February 13 when the class begins at 6 p.m.
(five sessions)

DBG's Morrison Center

Please indicate your section on the registration form.

Please bring a towel, clippers (or pruning shears) and an awl.

Instructor: Robin Taylor Daugherty

Fee: \$95 members/\$105 non-members (includes a \$35 materials fee for the construction of five baskets).

Basketry Workshop: Heart-Shaped Basket

(one session)

Section I: Friday, February 7

Section II: Saturday, February 8
9 a.m. to 5 p.m. DBG's Morrison Center

Please bring a sack lunch, pruning shears, a sharp knife, and a towel to class.

Instructor: Robin Taylor Daugherty.

Fee: \$28 members/\$31 non-members (includes \$8 for materials)

Basketry Workshop: Shaker Cheese Basket

(one session)

Section I: Monday, February 17

Section II: Saturday, February 22
9 a.m. to 5 p.m. DBG's Morrison Center

Please bring a towel, clippers (or pruning shears), awl, spring-type clothespins, tape measure and a sack lunch.

Instructor: Robin Taylor Daugherty

Fee: \$28 members/\$31 non-members (includes \$8 for materials).

Make Your Own Easter Basket

Section I: Wednesday, March 12
Classroom B

Section II: Saturday, March 15
DBG's Morrison Center

(one session)

9 a.m. to 5 p.m.

Please indicate your section on the registration form.

Start a family tradition by creating your own handmade Easter basket from natural reed. Wrap its handle and decorate it appropriately. Students can expect to complete



*Easter Basket
by Robin
Taylor
Daugherty*

their heirloom in this one-day class.

No previous experience is necessary and students should bring a sack lunch, pruning shears, a sharp knife, hammer, awl, spring-type clothespins, tape measure and a hammer to class.

Instructor: Robin Taylor Daugherty

Fee: \$30.50 members/\$33.50 non-members (includes \$8 for materials)

Botanical Illustration II

Tuesdays, February 11, 18, 25,
March 4, 11, 18

(six sessions)

9:30 to 11:30 a.m. Classroom B

Cold winter mornings are an ideal time to get acquainted with some of the exotic plants in our collections.

Previous drawing experience is necessary to enroll in this course which will stress accurate drawing of flowers, stems, roots and leaves. Fresh plant material will be used and will be dissected when necessary to draw individual plant parts.

Students work with pencils, pen and ink, and finally progress to watercolors. Please bring several sharp drawing pencils and an eraser to the first meeting.

Instructor: Angela Overy received her National Diploma of Design from London University, England and designed in London, New York and San Francisco before settling in Denver.

Fee: \$48 members/\$53 non-members.

Limit: 20

Winter Ecology: Plants and Animal Evidence at Chatfield Arboretum

(one session)

Sunday, February 2
9 a.m. to 2 p.m.

How do conifers and deciduous trees survive the winter? Would you like to see vole tunnels and their teeth marks in the bark of cottonwood trees? Students in this one-day field session will learn how to spot animal tracks and dens, some winter botany, plus identification of



*Appalachian
Egg Basket*

*Heart-Shaped
Basket*

*Shaker Cheese
Basket*

Wicker Basket

wintering birds.

Meet: at 9 a.m. in the schoolhouse parking lot of Chatfield Arboretum. The Arboretum is located less than ½ mile to the west on Deer Creek Road just off Highway 75 (County Line Road). Please be prompt and dress in warm clothing including walking shoes for snow. Don't forget your lunch and binoculars.

Instructor: Tina Jones is a wildlife instructor who teaches at the University of Colorado and the Denver Museum of Natural History as well as DBG. She has many years of field experience.

Fee: \$7.50 members/\$8.25 non-members

Limit: 20

Birds of Colorado and Their Plant Associations

Saturday, February 8
8:30 a.m. to 12:30 p.m.
(one session) **DBG House**

What different plants do ptarmigan and sage grouse feed on? Where do yellow warblers nest? Why are red crossbills found frequently one year and then not seen the next? Participants of this one-day course will learn the various Colorado life zones from plains to tundra as well as why food and nesting requirements limit different bird species to specific elevations and habitats.

Instructor: Tina Jones

Fee: \$16 members/\$17.50 non-members

Tree Walk at Fairmount Cemetery, Denver

Section II: Saturday, February 15
(one session) **1:30 to 3:30 p.m.**

During the summers of 1890 and 1891 over 4,000 trees including seven species of oak, sycamores, silver maples, Kentucky coffee trees, buckeyes, and several pines were all planted at Fairmount Cemetery. This is an opportunity to observe these as well as some more unusual trees such as scarlet oak and yellow buckeye. A walk through these mature, historic specimens will sharpen your identification skills.

Leader: Dr. William G. Gambill, Jr., Director Emeritus and Taxonomist at DBG, is a former botany and biology professor.

Meet: at 1:30 p.m. in the parking lot just inside the entrance. Fairmount Cemetery is located at East Alameda and Quebec Streets in Denver.

Fee: \$5.50 members/\$6 non-members (includes \$3 for *Trail of Trees*, a 64-page illustrated tree guide to Fairmount Cemetery).

Limit: 18

Intensive Techniques for Growing Vegetables

Wednesdays, February 5, 12, 19, 26
(four sessions)
7 to 9 p.m. **DBG's Morrison Center**

Grow more vegetables in a smaller space and use less energy doing it. This course will explain garden design, soil preparation, variety selection, maintenance, specific culture of common vegetables and potential problems with pests and diseases. Emphasis on intensive gardening methods such as wide-row planting, intercropping and companion planting will maximize your harvest and save you work.

Instructor: Lynn Thompson is a horticulturist who coordinates DBG's Community Vegetable Gardening Program. She has taught many classes on topics pertaining to home vegetable gardening in Colorado.

Fee: \$32 members/\$35 non-members

Know and Grow Orchids

Saturdays, February 8, 15, 22
(three sessions)
9 to 11 a.m. **Classroom C**

Discover the fantastic orchid family and their basic cultural requirements in this three-session course. Following an introduction to their natural and human history, participants will learn how to develop a good collection for their homes or greenhouses.

Fundamentals of soil media, watering and fertilizer will be covered through lectures and demonstrations. Each student will have the opportunity to take a division home following a hands-on dividing and repotting session.

Instructor: Botanist Horticulturist Larry Latta oversees the DBG greenhouse collections. An orchid hobbyist for 15 years, he has collected in the wilds of Ecuador, Venezuela and eastern Mexico.

Fee: \$24 members/\$26.50 non-members

Limit: 18

Planting Design for Homeowners

Mondays, February 10, 17
from 7 to 9 p.m.
Saturday, February 15
from 1 to 5 p.m.
(three sessions) **Classroom B**

The plantings in your home landscape should suit your neighborhood, your particular site, and the wishes and desires of your family. The following topics will be covered in this class: development of design objectives, site analysis, categories of plants and their uses, elements and principles of design, special

Colorado conditions, technical planting and maintenance, plant acquisition and landscape construction.

Instructor: Jan Caniglia, M.A., Landscape Architect, has practiced community design, environmental planning and residential and commercial design for seven years. She has taught numerous courses in landscape design.

Fee: \$32 members/\$35 non-members



"Freesias" by
Scott
Yablonski, a
1985 Botanical
Illustration
student

In Search of Owls, Hawks and Waterfowl

Sunday, March 16
(one session)
8 a.m. to noon

Great horned owls are one of the few birds that pair up for courtship very early in the year. Participants will walk and drive around the Chatfield Reservoir State Park area in search of owl evidence and will learn the identification of certain hawks and waterfowl.

A discussion of native Colorado owl species and their habitats will be included. Bring binoculars.

Instructor: Tina Jones

Meet: at 8 a.m. in the main DBG parking lot to carpool and receive directions. Please be prompt and remember to wear warm clothing and shoes and bring drinking water.

Fee: \$6.50 members/\$7 non-members

Limit: 20

Spots for Kids

"Bradley," a ceramic dinosaur by Richard Cohen



The Crocodile's Smile

Saturday, February 1
(one session) Classroom A
For children of ages 5-7
Section I: : 10 a.m. to noon
Section II: 1 to 3 p.m.

Please indicate your section on the registration form.

Who do you see in the Gardens' jungle? Create the creatures that are floating, flying, and slithering through their jungle home. Visit the Conservatory and discover how to paint or draw lines that are straight for the lurking, smiling crocodile, curved for the long and swinging tail of the monkey, and smooth for the tiger's stripes.

Use glowing colors for jungle flowers and learn new ways to use pastels and watercolors. Listen to jungle sounds and stories.

Instructor: Jo Duranceau Cannon

Fee: \$6.50 members/\$7 non-members

Limit: 12

Dragons and Unicorns

Sunday, February 2; 1 to 3 p.m.
(one session) Classroom A
For children of ages 8-11

Tour the Gardens and discover the magical world of plants in medieval forests and courtyards. Find out what plants and herbs were used for sorcerer's brews. Make your own knight's armor or concoct a magic potion of flowers and herbs.

Instructor: Jo Duranceau Cannon

Fee: \$6.50 members/\$7 non-members

Limit: 12

Petals from Parnassus

Saturday, February 8
(one session) Classroom A
Section I: For children of ages 5-7
10 a.m. to noon
Section II: For children of ages 8-11
1 to 3 p.m.

Please indicate your section on the registration form.

On top of Mount Parnassus in a gleaming palace with 12 chairs live Greek gods and goddesses. Explore mythology and learn the tales of how Persephone returns to earth each spring to bring us wildflowers and how Pluto gave the peony its name.

Visit the Smithsonian Institution's exhibit, "Peonies of Greece," and find out why the "queen of flowers" can be either magic or medicine.

Instructor: Jo Duranceau Cannon

Fee: \$6.50 members/\$7 non-members

Limit: 12

Hearts and Flowers

(one session) Classroom A
Section I: For children of ages 5-7
Thursday, February 13
3:30 to 5:30 p.m.
Section II: For children of ages 8-11
Friday, February 14
3:30 to 5:30 p.m.

Please indicate your section on the registration form.

The pioneers of the Plains made

their valentine greetings from flowers, buttons, and lace. Create your own old-fashioned valentine and make a cupid with a moveable bow so his arrow can fly. Design a series of pop-up hearts. Use a quill pen to compose a valentine rhyme and learn the legends of St. Valentine's Day. Tour the Gardens to discover the lore and language of flowers.

Instructor: Jo Duranceau Cannon

Fee: \$6.50 members/\$7 non-members

Limit: 12

Dinosaur Park—Ceramics for Kids

For children of ages 8-11
Saturdays, March 8, 15, 22
(three sessions)
10 a.m. to noon Classroom B

Take a journey into prehistoric times and learn about the extinct plants and animals which inhabited the earth before man. Use fossil plants as models and create your own miniature dinosaur park from clay and fill it full of your own hand-painted creatures.

Instructor: Richard Cohen studied art at Denver University and has taught children's classes at the Jewish Community Center and Cook Park Recreation Center. His ceramic work is exhibited widely and was most recently honored as "Best of Show" at the Colorado Artist Craftsman Exhibition in Arvada.

Fee: \$26 members/\$29 non-members (includes \$6 for materials). **Limit:** 12

Gardening Tips for February

7

Forcing branches of early-flowering trees and shrubs into flower is an easy project that will provide welcome beauty and fragrance to the home gardener.

This practice of inducing branches of spring-flowering plant material to bloom in late winter has been practiced for many generations by Europeans, principally the Dutch and the English. We often admire the large, early trusses of lilac and forsythia in the florists' shops but we fail to take advantage of our home resources to accomplish this ourselves.

Perhaps "forcing" is not the best term and "encouraging" would be more appropriate since the flowers are already in bud form when the process is started.

Early-flowering plants such as forsythia, flowering quince, viburnum, crab apple, almond, plum, spiraea and lilac form their flower buds in the fall and as spring approaches these enlarge and finally open. At any time after January, however, if the plump and rounded flower buds have started to swell, they can be cut and encouraged to flower at an earlier date.

The practice is simple. Choose healthy branches that have the most clusters of flower buds. By carefully selecting these branches some desired pruning will result. Take only pieces that will not spoil the overall appearance and remember that a few well-chosen branches can create a better floral display than masses of unrelated branches.

Stem length should be between 12 and 30 inches depending on the species. The flower buds are usually larger than the leaf buds and on fruit trees such as crab apple, almond and plum they are usually found on spurs. The bud scales show small lines of movement lengthwise along the buds as they swell.

If the weather is cold and frosty when you pick your stems, take them indoors and make a fresh cut at the base. Crush the bottom two to three inches of the stem lightly and immerse the branches completely in a bath of cool water overnight. This allows for some acclimatization.

If they were cut on a warm, sunny day, you need only prepare the base and set them in a suitable water-filled container. Provide about three inches of warm water and a few lumps of charcoal to keep the water "sweet" or fresh.

Place the containers in an area of low light and a temperature of 50-55 F for a week. Gradually transfer them to a brighter spot for the next three to four weeks, increasing the temperature to 65-70 F until the buds start to break open. This length of time will decrease as the season nears the outdoor flowering date.

Mist the branches with warm water once or twice a day and keep

the water level at three to four inches. You may wish to add fertilizer, at half-strength, twice during this time. Finally, when the buds develop some color, you may move the branches to a spot where you can enjoy them, preferably one with good but not direct sunlight. This will prolong the flowering period. If the temperature drops to 60-65 F during this period so much the better.

The earliest flowers may come from cornelian dogwood, pussy willow and forsythia and the latest from crab apple and lilac but experiment with other spring-flowering trees and shrubs such as redbud, shadbush and spiraea. For fresh foliage you might try oak, maple, aspen or birch.

Consider forcing branches to break the bleak dullness of our long winters. You have nothing to lose and an early spring to gain!

Andrew Pierce
Assistant Director at
Denver Botanic Gardens



This notecard, "Shofu-en Garden," was designed by Professor Koichi Kawana and is available in the DBG Gift Shop.

Denver Botanic Gardens
909 York Street
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

Registration Form for Classes and Field Trips

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Address _____

City _____ State _____ Zip _____



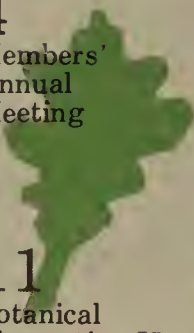




Home Tel. No. _____ Business Tel. No. _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No

C A L E N D A R FEB

Regular Meetings of Plant Societies
A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

African Violet Society, 4th Thurs. of 7 months; Bonsai Society, 1st & 3rd Tues; Cactus & Succulent Society, 2nd Tues.; Civic Garden Club, 1st Fri.; Colorado Native Plant Society, 4th Wed.; Dahlia Society, 2nd Fri.; Gladiolus Society, call for info.; Gloxinia Gesneriad Growers, 1st Sat.; Hemerocallis Society, 3rd Sun. of 4 months; Ikebana International, 4th Fri.; Indoor Light Gardening Society, 3rd Thurs.; Iris Society, spring & fall dates; Men's Garden Club, 4th Thurs.; Mycological Society, 2nd Mon.; Orchid Society, 1st Tues.; Rock Garden Society, 3rd Wed.; Rose Society, 2nd Thurs.; Ultra Violet Club, 4th Mon.; Water Garden Society, 2nd Sun. of 5 months

S	M	T	W	T	F	S
						
2 Winter Ecology, Dragons and Unicorns	3	4 Members' Annual Meeting	5 Intensive Vegetable Gardening	6	7 Heart-Shaped Basket	8 The Crocodile's Smile February 1-9 Garden and Home Show
9	10 Planting Design	11 Botanical Illustration II, Appalachian Basketry	12	13 Rock Gardening, Wicker Basketry, Hearts and Flowers	14 Hearts and Flowers	8 Birds & Plants of Colo., Basketry, Orchids, Petals from Parnassus February 8 - March 16 "Peonies of Greece"
16	17 Shaker Cheese Basket	18	19	20	21	15 Tree Walk at Fairmount Cemetery
23	24	25	26	27	28	22 Shaker Cheese Basket

Coming Next Month

March 8
Dinosaur Park—Ceramics for Kids

March 12
Make Your Own Easter Basket

March 15
Make Your Own Easter Basket

March 16
In Search of Owls, Hawks and Waterfowl

March 23
Rose Symposium

March 29-30
African Violet Show and Sale

Denver Botanic Gardens, Inc.
909 York Street
Denver, Colorado 80206
303-575-3751

February 1986

TIME VALUE

Address correction requested



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U.S. Postage
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Denver, CO



NEW S



Inside:

*Classes for adults
page 5*

*Children's
program page 8*

Gardens Awarded \$1,000,000 Challenge Grant to Strengthen Endowment Fund

The Boettcher Foundation has announced a \$1,000,000 challenge grant to Denver Botanic Gardens to greatly strengthen the Gardens present Endowment Fund. With city financial support of the Gardens decreasing, income generated by careful and profitable investment of our Endowment Fund has proven to be crucial to maintaining the quality of what is nationally recognized as one of this country's finest horticultural/botanical institutions.

Under the terms of this challenge grant, the Denver Botanic Gardens

Foundation must raise an additional \$2,000,000 in matching funds over the next four years. Edward P. Connors, President of the Board of Trustees, will be naming a chairman to coordinate the challenge grant matching drive. The Board of Trustees, the chairman and our Development Office staff will work together in planning and implementing a drive to raise, by 1989, the \$2,000,000 matching fund goal.

As members of the Gardens, each of you will play an important role in helping us meet our fund raising goal. It is with your past encourage-

ment and support that we recently achieved accreditation by the American Association of Museums. Working together, I am confident that we can raise the funds necessary to match the challenge grant awarded us by the Boettcher Foundation.

In the process of doing so, we can ensure greater financial stability for the future of our Denver Botanic Gardens. The benefactors of a successful matching fund drive will not only include those of us who are today deeply committed to the

continued on page 2

Art in the Gardens

Marketing Coordinator Diana Hunt has received a tremendous response from the announcement in the January newsletter of the "Art in the Gardens" contest in conjunction with the 1986 Plant and Book Sale. She wishes to thank everyone who took the time to call for more information and looks forward to receiving the entries. It will be a difficult decision, she is sure, for the panel of judges. Results and details will be in the April *Green Thumb News*.

Plant and Book Sale Volunteers Needed

Spring and Denver Botanic Gardens' Annual Plant and Book Sale are both just around the corner. This sale's existence depends upon the tremendous energy and dedication of our volunteers. In order to make this a successful event, assistance is needed in pricing plants, setting up for the sale, selling plants, and operating the cash registers. Please call Lydia Toll, 333-1655, or Midge Roosevelt at 789-3900 if you have time to help, in any way, at the 1986 Annual Plant and Book Sale to be held on May 9 and 10.



Plant Sale volunteers Lois McPhee (left) and Liz Arend

Gardens Awarded

continued from page 1

Gardens and its programs, but future generations of members and visitors who will enjoy the Gardens in years to come.

Obviously, you will be hearing and reading a great deal more about this exciting Boettcher Foundation challenge grant in the next four years. Please help us meet our matching fund goal by continuing your support of the Gardens and by encouraging your friends and neighbors to also become members and actively support our Denver Botanic Gardens.

Merle M. Moore

Merle M. Moore
Executive Director

Tributes

In memory of Mrs. Karl Arndt
Jane Silverstein Ries

In memory of Margaret C. Coe
Mr. & Mrs. John Clark Coe

In memory of Bertha Hennessy
Evelyn Johnson

In memory of T. Paul Maslin
Patricia Thorn & Joel Hayward

In memory of Donald K. McClure, Sr.
Steve & Jean Holt, Erika & Rachel

In memory of Ida Quentin Mitchell
(Lobby Court Fund)

Bob & Avalonne Kosanke

In memory of Graham B. Morrison
Bob & Avalonne Kosanke

In memory of Mrs. Keith Munday
Allyne E. Lawless

In memory of Virginia Skartvedt
Mr. & Mrs. Lawrence A. Long

In memory of Jack Wallace
Bob & Avalonne Kosanke

In memory of Dr. William H. Wierman
Janet M. Wierman

In memory of William J. Zwigert
Bob & Avalonne Kosanke

1986 Rose Symposium

"Promise Yourself a Rose Garden" is the theme of this year's Rose Symposium. Knowledgeable rosarians from throughout the state of Colorado will present a variety of programs the afternoon of Sunday, March 23 in John C. Mitchell II Hall.

Subjects to be covered include where and how to select and prepare a new rose bed. Consideration will be given to the types of roses available and recommendations will be made as to the particular varieties that do well in our climate. The pros and cons of bare-root, packaged and container-grown roses will be explored.

By providing a little care (and love) your roses will flourish during the growing season. Advice will be provided on pruning, watering and fertilizing your roses. Rose pests and diseases will be reviewed with recommendations on the prevention and control of these problems.

The capriciousness of Denver's climate presents unique conditions for growing roses. A discussion on rose care, a potpourri round-table discussion, will complete the afternoon. Bring your questions and if the symposium hasn't satisfied your special needs, speak up during the discussion session.

This symposium meets from 1 to 4:30 p.m. While admission to the program is free, there is a gate admission fee for non-members of Denver Botanic Gardens.

Green Thumb News Number 86—3 March 1986

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than February 20 for April, March 20 for May and April 18 for June.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.



Accredited by the
American Association
of Museums

Calendar of Events

Denver Botanic Gardens

January 1-12	"Paint by Mr. Amos Ferguson" art exhibit
February 4	Annual Membership Meeting
February 8-	"Peonies of Greece, Myth, Science
March 16	and Art" Smithsonian exhibit
March 23	Rose Symposium
March 29-30	Rocky Mountain African Violet Council show and sale
April 5-6	Colorado Cactus and Succulent Society show and sale
April 12-13	Spring Flower Show
April 17	Free day for Denver City and County residents
April 20	Grand Opening of "Art in the Gardens"
April 21-May 5	"Art in the Gardens" exhibit
May 9, 10	Annual Plant and Book Sale
May 17	Free day for Denver City and County residents
May 31-June 1	American Iris Society show
June 14-15	Rocky Mountain Bonsai Society show
June 17	Free day for Denver City and County residents
June 17	Young Audiences Concert
June 22	Members Gardening Seminar
June 26	Garden Concerts
June 28	Scarecrow Contest, Community Gardens
June 28-July 6	International Rock Garden Conference meetings in Boulder and Denver Botanic Gardens
July 1	Young Audiences Concert
July 10, 11	Garden Concerts
July 15	Young Audiences Concert
July 17	Free day for Denver City and County residents
July 19	Garden & Terrace Tour — DBG Guild
July 20	American Hemerocallis Society — "Daylily Show"
July 24-25	Garden Concerts
July 23-27	Colorado Watercolor Society show and sale
July 30-August 3	Asian Pacific Festival
August 7-8	Garden Concerts
August 7-10	Glass Artists Fellowship — "Glass at the Gardens" show and sale
August 17	Mushroom Fair — Identification, recipes, art
August 21-22	Garden Concerts
August 20-24	Denver Artists Guild show and sale
August 31	Denver Rose Society show
September 4	Garden Concert
September 17	Free day for Denver City and County residents
October 10-12	Denver Orchid Society show
October 17	Free day for Denver City and County residents
October 18	African Violet Council sale
October 25	Harvest Party
November 3	Carl Tempel Wildflower lecture
November 5-10	Botanical Illustration Show
November 17	Free day for Denver City and County residents
November 21-22	Gift Shop "Holiday Sale"
December 4-6	Garden Club of Denver "Table Settings" — Icehouse
December 14	Heralding the Season
December 15-31	"Blossoms of Light" celebration

Extended evening hours, from 5 P.M. to dusk, every Saturday, Sunday, Wednesday beginning June 28 through August 31, 1986. (Exceptions are July 30, August 2, 3 when the Gardens are closed to the public.)

Denver Botanic Gardens
1005 York Street 575-3751, 575-2547



<i>July 18</i>	Young Audiences Concert
<i>July 17</i>	Free day for Denver City and County residents
<i>July 19</i>	Garden & Terrace Tour — DBG Guild
<i>July 20</i>	American Hemerocallis Society — "Daylily Show"
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Denver Botanic Gardens
1005 York Street 575-3751, 575-2547

Cactus and Succulent Show and Sale

The annual Colorado Cactus and Succulent Society Spring Show and Sale will be held April 5 and 6, in John C. Mitchell II Hall at Denver Botanic Gardens from 9 a.m. to 4:45 p.m. As in the past, there will be thousands of cacti and other succulents for sale. You will be able to find the common and not-so-common plants from the 2¼-inch pot size up to large specimen sizes.

Mini-workshops on various subjects such as "Pest Control," "Propagation," "Repotting," and "Dish Garden Design and Planting," will be offered during both days and club members will be available to answer questions and help you choose plants.

Judging of show plants will be held on Saturday morning and the public is invited to enter plants in



the competition. For more information on the show, please contact Jim Sykes at 278-7524.

Educational displays are always an interesting and informative part of the show and sale. A repeat of last year's popular "you pick it, we pot it" dish garden planting will be offered and potting soils, containers and T-shirts will be available. Those joining the club during the show and sale will receive a free plant. An interpreter for the deaf will be available both days. There will be no charge for admission other than the non-member gate fee.



African Violet Society member Terry Grimlie assists Suzanne Kaller at the 1985 African Violet Show and Sale.

Rocky Mountain African Violet Council Show and Sale

Although in the late 1930s only ten varieties of African violets were available, thousands of varieties can now be obtained. These popular little gems have been called "queens of the indoor gardening kingdom" by many. If you want to see why, visit Denver Botanic Gardens on Saturday, March 29 and Sunday, March 30.

African violets are grown primarily for their flowers—large and small with a wide array of colors. The Rocky Mountain African Violet Council's annual show and sale, "The Great Violet Get-Together," offers an opportunity to observe this assortment and to develop an affection for growing these beauties.

A show of award-winning violets will take place in John C. Mitchell II Hall. Council members will also be on hand to discuss, on an individual basis, problems (and delights) that growers might have. The collection in the Hall should tempt new and experienced growers to visit the sale in the classrooms where a huge selection of plants and leaves ready for planting will be found.

The show and sale hours are from 1 to 4:30 p.m. on Saturday and 10 a.m. to 4:30 p.m. on Sunday. The public is invited. There will be no charge to attend the show and sale, however DBG's non-member gate admission fee will be in effect. Get together with other violet growers on March 29 and 30 to see what's new under the grow lights.

Great Getaways—Yellowstone and the Tetons, July 1986

A fabulous and diverse trip to northwestern Wyoming is being offered from July 12 to 20. Edward Connors, President of Denver Botanic Gardens' Board of Trustees, will lead 13 people from Denver to Yellowstone and Grand Teton National Parks on a trip that includes hiking, horseback riding, river floating and exploring.

A van with 13 adventurers will depart from Denver on July 12 for Cody, Wyoming—the first stop. They will visit the Buffalo Bill Historical Center for a look at some of the region's colorful history. The next two nights will then be spent in cabins at Canyon Village in Yellowstone to allow everyone time to botanize as well as visit the popular sights offered by the Park.

Then it's on to Yellowstone's southern boundary to meet Jackson outfitter Galloway Clover for a three-day horseback trip into the Park's southwestern quadrant. Tents will be provided for sleeping under the stars. Galloway Clover will lead the group past diverse ecosystems and vegetation and some of the region's beautiful waterfalls.

The next three nights will be spent in the comfort of the Jackson Lake Lodge in Grand Teton National Park. For added variety, a river trip down the Snake River to Moose Junction will precede a hike of the Teton's canyons in the Jenny Lake region.

Hiking shoes or boots and a

continued on page 4

Succulent enthusiast and Gardener Florist II Gary Davis at last year's Cactus and Succulent Show and Sale

PEONIES OF GREECE

MYTH, SCIENCE AND ART



Denver Botanic Gardens

February 8 – March 16, 1986

“Peonies of Greece” Continues until March 16

Twelve framed lithographs of peonies from a contemporary limited edition portfolio, *Paeonies of Greece*, have been contributed to Denver Botanic Gardens by Mr. Anthony G. Andrikopoulos of Cheyenne, Wyoming. This gift is accompanied by a profusely illustrated commentary volume, *Peonies of Greece, a Taxonomic and Historical Survey of the Genus *Paeonia* in Greece* by William T. Stearn and Peter H. Davis.

This donation is in memory of his mother, Margaret Elizabeth Roman Andrikopoulos, an avid and skillful gardener who shared the cultural Greek affection for peonies. The presentation of this generous donation inspired the hosting by the Gardens of the Smithsonian Institution's exhibit “Peonies of Greece: Myth, Science, and Art.”

The framework of this Smithsonian exhibition consists of panels which describe the peony in Greek mythology, the deterioration of art during the middle ages and the subsequent development of botanical illustration through the 16th, 17th and 18th centuries. Information on the cultivation and distribution of the peony is also included.

DBG Librarian Solange Gignac will gladly accept your book donations for the Annual Plant and Book Sale on May 9 and 10.

The exhibit and the twelve lithographs will be highlighted by examples of early herbals from the Waring Rare Book Room of the Helen Fowler Library at Denver Botanic Gardens.

Our sincere appreciation is due to Mr. Andrikopoulos and to the Bonfils-Stanton Foundation for its continuing support of DBG's traveling exhibit program. “Peonies of Greece” presents a perspective previously unknown to many, and is a historical look at these plants and their progression through myth, science and art.

This special exhibit will be at the Gardens until March 16. Commemorative posters depicting one of the peonies will be sold during the show. There will be no exhibit fee other than the regular non-member gate admission fee and members with guest privileges are encouraged to take this opportunity to introduce others to the Gardens.



Great Getaways— continued from page 3

sleeping bag are required although this is not to be an arduous trip. However, do plan to spend three days on horseback. Three dinners, two lunches and all transportation, lodging, and gratuities are included in the price of \$645. A deposit of \$200 is required by April 1.

For those who have been looking for a trip that gets out and away from it all, this is your opportunity. For additional information direct inquiries to DBG's Assistant Director Andrew Pierce, 575-3751, or to Edward Connors in the evenings at 771-5842.

New Alpine Garden to be Built in Vail

What would be a better site than the middle of the Rocky Mountains for a major new alpine garden? A group of Vail citizens is well into the process of organizing just that.

The 1.5 acre Vail Alpine Garden in the Gerald R. Ford Park is being built at a site 8,200 feet above sea level. Although it emphasizes North American alpine and subalpine plants, some alpine plants from other regions around the world will be included.

The Alpine Garden in Vail will provide a different environment and a different design concept than that of Denver Botanic Gardens' Rock Alpine Garden. It is hoped that these two gardens will complement each other and that the development of a second major alpine garden in the state will enhance Colorado's image as a focal point for alpine horticulture in North America.

If you are interested in membership and would like to support the Vail Alpine Garden, please call Helen Fritch, 476-0103, or Marty Jones, 949-6672; or write to the Vail Alpine Garden, 183 Gore Creek Drive, Vail, Colorado 81657. The anticipated opening of this garden is the fall of 1988.

Louisa Ward Arps (1901-1986)

Louisa Ward Arps, distinguished historian, author and librarian, left many lasting remembrances during her longtime relationship with the staff of Denver Botanic Gardens.

As an author and historian, her efforts have had an important effect on the botanical community of Denver. One of her literary accomplishments includes the popular book, *High Country Names*, that she co-authored with Elinor Kingery. Another book she co-authored, *Cemetery to Conservatory*, is frequently asked for in Denver Botanic Gardens' Gift Shop. This book tells the tale of how Denver's green dream came true, and is an entertaining history of the land around the Gardens from 1859 to 1978.

Louisa Ward Arps' death on January 11 was a profound loss to all of her friends. Her enthusiasm and love for the mountains of Colorado has encouraged many to follow in her path. She was a source of inspiration to noted historian Tom Noel and her former colleague “Pete” Petersen.

Friends may make a contribution in her memory to the charity of their choice.

Rock Gardening for the Home Landscape

Tuesdays, March 25, April 1, 8
(three sessions)
7 to 9 p.m. Classroom B

Do you have a steep bank or a problem slope in your garden? A rock garden may be a colorful and interesting solution to such a problem spot. This three-part introduction to the art of rock gardening will demonstrate how various people have used naturalistic landscaping to solve difficult garden problems.

In the first session, a short history of the art of rock gardening in China, Japan and the West will be illustrated with slides, and the aesthetics of rock plant placement will be analyzed.

The second meeting will include a workshop on rock placement where class members will construct miniature replicas of rock gardens with sand and pebbles.

Finally, a review of the most widely available plant materials and a discussion of the proper selection of plant materials for actual garden needs will conclude the course.

Instructor: Panayoti Kelaidis is curator of the award-winning Rock Alpine Garden at DBG and is also an enthusiastic teacher.

Fee: \$24 members/\$26.50 non-members



*Townsendia
exscapa,
Easter daisy,
by Emma A.
Ervin*

Botanical Illustration— Spring Notecards

Tuesdays, April 1, 8, (skip April 15),
22, 29

(four sessions)

9:30 to 11:30 a.m. Classroom B

Have you ever admired the delicate botanical notecards often seen in stationery stores? This is your chance to learn how to create some of your own.

In this introductory course, you will learn to draw spring plants such as daffodils and tulips as the season progresses. Choose plants from DBG or your own garden and study their growth from swelling bud to leaf or blossom.

Students in this class will be

provided with a dozen cards and envelopes to illustrate. Instruction will be given to those students who wish to have their designs printed.

In the last two sessions students will use watercolors to complete their notecards. Please bring pencils and erasers to the first class.

Instructor: Angela Overy received her National Diploma of Design from London University, England, and designed in London, New York and San Francisco before settling in Denver. Over the years, many DBG students have found a new interest and ability in her enthusiastic classes and lectures.

Fee: \$37 members/\$41 non-members
(includes \$5 for materials)

Limit: 20



*Pasque flowers,
Anemone
pulsatilla*

CTA S S E T S

Spring
1986

Denver Botanic Gardens



In Search of Owls, Hawks and Waterfowl

Sunday, March 16
(one session)
8 a.m. to noon

Great horned owls are one of the few birds that pair up for courtship very early in the year. Participants will walk and drive around the Chatfield Reservoir State Park area in search of owl evidence and will learn the identification of certain hawks and waterfowl.

A discussion of native Colorado owl species and their habitats will be included. Bring binoculars.

Winter Botany on Snowshoes

Sunday, April 6
(one session)
8:30 a.m. to 4:30 p.m.

Learn to distinguish the Colorado conifers on this all-day field trip with stops at Genesee Park, and at various sites along Guanella Pass. Participants should come equipped with snowshoes, which will help provide better access to the forest.

With luck, the group may see white-tailed ptarmigan while discussing alpine krummholtz.

Ukranian Easter Eggs

Saturday, March 22
(one session)
9 a.m. to noon DBG's Morrison Center

Ukranian Easter egg decorating, or *pysanky*, is a centuries-old technique of creating intricate and brilliantly colored patterns on eggs. The process is similar to that used in batik: designs are drawn with molten wax and are over-dyed.

Please bring a candle, rubber gloves, and three or more uncooked jumbo or extra-large eggs to class; all other materials will be provided.



Former
Ukranian
Easter Egg
student, Vicki
Kingry

Instructor: Tina Jones

Meet: at 8 a.m. in the main DBG parking lot to carpool and receive directions. Please be prompt and remember to wear warm clothing and shoes and bring drinking water. In the event of a snowstorm, students will be contacted by the instructor; otherwise, the trip will go as planned. Tina Jones will answer questions at 722-8514.

Fee: \$6.50 members/\$7 non-members

Limit: 20

The class will not involve strenuous exercise so come well-dressed for the cold we are likely to encounter at 11,000 feet. Even those who have never snowshoed before will find it is an easy and exciting way to hike in the winter.

For information on appropriate clothing (or where to rent snowshoes) please contact the instructor at 722-8514. Don't forget your lunch and a warm drink.

Meet: in the main DBG parking lot promptly at 8:30 a.m.

Instructor: Tina Jones is a wildlife instructor who teaches at the University of Colorado and the Denver Museum of Natural History as well as Denver Botanic Gardens. She has many years of field experience.

Fee: \$7.50 members/\$8.25 non-members

Instructor: Peggy Johnston studied art education at the University of Wyoming and Western Wyoming Community College. She has extensive teaching experience and her work is shown widely throughout Wyoming and Colorado.

Fee: \$14 members/\$15.50 non-members (includes \$2 for materials).

Limit: 20

Watercolor and Mixed Media Painting

Saturdays, April 5, 12, 19, 26, May 3
(five sessions)

1 to 3 p.m. Classroom B

Translate your vision of nature into exciting color! Wet-in-wet techniques as well as painting on dry paper will be demonstrated. From quick gestures to slow contemplative studies, students will explore the rich world of nature at Denver Botanic Gardens. Instruction and demonstrations in assorted media, including pastels, will be provided.

Bring whatever drawing or printing materials you have (such as sketch pads, pencils and/or watercolors) to the first session.

Instructor: Oksana Ross, Ph.D., studied at New York University and Columbia University and has 32 years of teaching experience. She was formerly on the faculty of the University of Colorado at Denver, Metropolitan State College, and Colorado Women's College.

Fee: \$40 members/\$44 non-members

Limit: 20



Know and Grow Orchids

Saturdays, March 22, 29, April 5
(three sessions)

9 to 11 a.m. Classroom C

Discover the fantastic orchid family and their basic cultural requirements in this three-session course. Following an introduction to their natural and human history, participants will learn how to develop a good collection for their homes or greenhouses.

Fundamentals of soil media, watering and fertilizer will be covered through lectures and demonstrations. Each student will have the opportunity to take a division home following a hands-on dividing and repotting session.

Instructor: Botanist Horticulturist Larry Latta oversees the DBG greenhouse collections. An orchid hobbyist for 15 years, he has collected in the wilds of Ecuador, Venezuela and eastern Mexico.

Fee: \$24 members/\$26.50 non-members

Limit: 18

Perennial Pleasures

Thursdays, April 10, 17, 24, May 1
(skip May 8), May 15

(five sessions)

7 to 9 p.m. Classroom C

With proper planning and planting, perennials can enhance any garden with long-term beauty and reduced maintenance. Discover the pleasures of perennial gardening in this five-week course that covers garden design, soil preparation and cultivation as well as a multitude of suggested plants.

Perennials for specialized situations, such as shady areas, will also be discussed. There will be ample opportunity for discussion.

Instructor: Andrew Pierce is a horticulturist and is assistant director of DBG. He is an accomplished grower of perennials and alpine plants.

Fee: \$40 members/\$44 non-members

Limit: 18

Make Your Own Easter Basket

Section I: Wednesday, March 12
Classroom B

Section II: Saturday, March 15
DBG's Morrison Center

(one session)

9 a.m. to 5 p.m.

Please indicate your section on the registration form.

Start a family tradition by creating your own handmade Easter basket from natural reed. Wrap its handle and decorate it appropriately. Students can expect to complete their heirloom in this one-day class.

No previous experience is necessary and students should bring a sack lunch, pruning shears, a sharp knife, awl, spring-type clothespins, tape measure and a hammer to class.

Instructor: Robin Taylor Daugherty

Fee: \$30.50 members/\$33.50 non-members (includes \$8 for materials)

Limit: 10



*Easter Basket
by Robin
Taylor
Daugherty*

*Watercolor
Painting
instructor
Oksana Ross
and student
Charlie Bush*

Spots for Kids

Dinosaur Park—Ceramics for Kids

For children of ages 8-11
Saturdays, March 8, 15, 22
(three sessions)
10 a.m. to noon Classroom B

Take a journey into prehistoric times and learn about the extinct plants and animals which inhabited the earth before man. Use fossil plants as models and create your own miniature dinosaur park from clay and fill it full of your own hand-painted creatures.

Instructor: Richard Cohen studied art at Denver University and has taught children's classes at the Jewish Community Center and Cook Park Recreation Center. His ceramic work is exhibited widely and was most recently honored as "Best of Show" at the Colorado Artist Craftsman Exhibition in Arvada.

Fee: \$26 members/\$29 non-members (includes \$6 for materials).

Limit: 12

Mexican Easter Fiesta

Saturday, March 22
(one session) Classroom A
Section I: For children of ages 5-7
10 a.m. to noon
Section II: For children of ages 8-11
1 to 3 p.m.

Please indicate your section on the registration form.

Ole! Create your very own Mexican Easter Festival! Learn about natural dyes as you tour the Gardens and use them to dye your own Mexican confetti-filled eggs. The Festival would not be complete without handmade tissue streamers and giant tissue flowers. All of these you'll make while listening to the Mariachis strum their guitars and shake their maracas.



Instructor: Carolyn Biester studied art at Wheaton College, Massachusetts, and has fond memories of celebrating Easter in Mexico as a child.

Fee: \$6.50 members/\$7 non-members

Limit: 12

Do you recognize this view of our Conservatory? (It was taken from a cherry-picker brought in for window cleaning.)

Denver Botanic Gardens
909 York Street
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

Registration Form for Classes and Field Trips

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Address _____

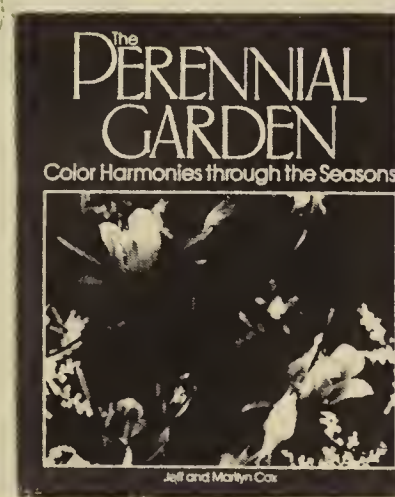
City _____ State _____ Zip _____

Home Tel. No. _____ Business Tel. No. _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No

Helen Fowler Library
Volume 9, No. 1
March 1986

Librarian:
Solange Gignac



Flower stalks arise in August on hostas, left, while one of the genus's many kinds of leaves is shown at right.

The Perennial Garden: Color Harmonies through the Seasons

By Jeff and Marilyn Cox. Rodale Press, Emmaus, Pa., 1985. \$21.95 SB 434 C68 1985.

This is an ambitious book dealing with many aspects of perennial garden plants from color harmonies to soil preparation to propagation. The authors, both Pennsylvania gardeners, lend us their insights and philosophies on composts, weeds and weeding, and how to fine-tune color compositions with plants.

A few novel and quite interesting features of the book are a month-by-month photo guide to color harmonies, with discussions of each garden composition pictured; highlighted lists of plants for various uses, from flowers that attract hummingbirds to perennials best propagated by root cuttings; and an extensive chart of perennial species listing zone, season of bloom, height, color, etc.

Included are many engaging discussions of unusual aspects of plants, their personalities and their herbal qualities, as well as legends

surrounding the plants and the derivations of Latin names. There are many novel eclectic ideas to be discovered for this is a book written from a very personal and episodal point of view. That it comes from the organic gardening tradition, the back-to-earth generation, the highly anecdotal view, is apparent. This book makes for stimulating reading and will likely lead you to more imaginative gardening. It is a book by American gardeners for American gardeners and it is in every way original.

Gwen Kelaidis

THE REVIEWERS

Susan Fry—
Denver Parks
Superintendent

Gwen
Kelaidis—
Gardener

Hazel
Kellogg—
Volunteer in
Helen Fowler
Library



The Staffs of Life

By E. J. Kahn, Jr. Little, Brown and Co., Boston, 1985. \$19.95. SB 175 K3 1985.

E. J. Kahn has conducted extensive research of the five "staffs of life" which are corn, potatoes, wheat, rice and soybeans. These, in their many forms, have sustained populations over most of the world since the beginning of recorded history, and their cultivation is a matter of international concern now. Mr. Kahn has used sources of information from many places in the world to uncover facts regarding the forms and uses of these crops which we have taken for granted. These fascinating facts, along with myths and superstitions, make delightfully interesting reading.

Mr. Kahn's primary concern is to discover methods of providing relief for the many starving people of the world. Much could be done to improve the quality and quantity of these food crops. He suggests developing better plant strains for fighting diseases, better means of cultivating the soil, better methods of dispersing the harvest and improved means of storing food to prevent spoilage.

With populations increasing at a rapid rate while natural resources continue decreasing and arable land keeps being destroyed, it becomes vitally important that people everywhere learn more about how to improve agricultural techniques. This book should be required reading for anyone interested in such projects.

Hazel Kellogg



Gardener George Goes to Town

Illustrated by Susan Moxley. Harper and Row, New York, 1982. \$9.95. j PZ M6982 1982.

Imagine hanging one's fish catch in an orange tree or buildings in the town being upside-down or tame birds presiding at a garden party. Sara Sharpe's text and Susan Moxley's illustrations take gardener George from beneath the Blue Mountains to town where he works his magic and returns home. The magic is teaching the townspeople how to garden.

Susan Fry



Rain Shadow

By James R. Newton. Crowell, New York, 1983. \$9.95. j QC 929 R17 N4 1983.

Black and white drawings enhance the shadows. The mist of the waterfall, the fluffy clouds and the sharp, white raindrops give dramatic contrasts and serve, with an easy text, to explain how rainfall is affected by geographical conditions. This is an excellent book for the youngster who reads, sees and thus remembers.

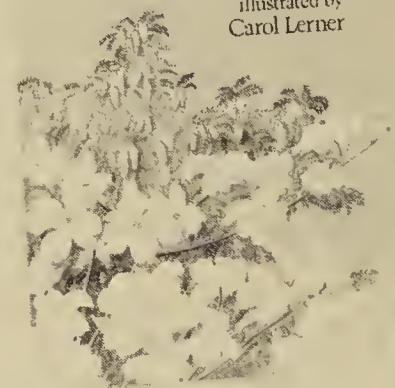
Susan Fry



Millicent E. Selsam

Tree Flowers

illustrated by Carol Lerner



Tree Flowers

By Millicent E. Selsam. William Morrow, New York, 1984. \$11.00. j QK 475.8 S4 1984.

A botanical study in prose and art of twelve flowering trees for children is beautifully written by the author and illustrated by the artist, Carol Lerner.

Added to the scientific information are facts that create interest: pussy willow seeds have parachutes; sugar maple fruits have wings and act like little helicopters; wasps like the nectar at the bottom of the horse chestnut blossoms; in Annapolis, Maryland, a giant tulip tree is sometimes called the liberty tree because native Americans and colonists made peace under its branches in 1652.

This is a good book from which a child could learn much about trees and many of these grow in the Denver area.

Susan Fry

The recent trend toward smaller, more intensively planted vegetable gardens has prompted gardeners to use trellising techniques to grow vine crops vertically and save space.

Trellises can be made of a variety of materials. The most important characteristics to look for are strength and durability and wood and heavy wire are the two most commonly used materials. Concrete reinforcing wire can be stretched between two poles for a fence-like trellis or formed into a cylinder to make a cage.

Cages require less space than fences and can be easily moved about the garden, or stored for winter. Many of the cages sold in stores will not support the weight of any plant greater than 15 inches in height, so it is advantageous to make your own.

Purchase a five- to six-foot piece of reinforcing wire at your local hardware store. A six-inch grid will allow for easy harvesting. Wires with finer meshes can be used but will require cutting holes large enough for your hands to fit through for harvesting. Using bolt cutters, cut the base to make prongs that will secure the cage to the soil. Wrap the wire to form a cylinder and securely fasten. Your finished cage should be 1½-2 feet in diameter and can be placed directly over your transplants or seedlings.

Natural climbers such as peas and beans will grow beautifully on a trellis. Plant the seeds at four- to six-inch intervals at the base and let them wind their way up the support. As with all vegetables, keep picking to encourage further production.

Crops that are not natural climbers, such as cucumbers, melons and squash will need to be coaxed. As the plant grows, thread the vine in and out of the mesh. Once it begins to fruit, additional support will be needed to aid the vine in withstanding the extra weight. Round fruits are easily supported by encasing them in a nylon stocking and tying it to the cage. Slings can be made of rags for more odd-shaped vegetables.

Most vine vegetables will grow well on a trellis without supporting the fruit with slings or stockings. Unfortunately, canteloupe separates from the stem when ripe (called slipping). This can cause a problem when grown vertically. To prevent dropping fruit, use support or choose varieties especially bred for trellis culture.

delicious canteloupe that averages three pounds and was developed specifically for trellis culture. 'Sakatas Sweet' and 'Honey Gold No. 9' are two more unusual canteloupes that are eaten skin and all. You may find them less sweet and juicy, but they will keep longer than the traditional varieties. As with all melons, setting out transplants will provide for an earlier and longer harvest.

Most cucumber varieties can be grown on a trellis with relative ease. Traditional pickling and eating cucumbers are usually light enough that they will not break the vine.

Japanese long cucumbers are especially easy to trellis since they have tendrils which will grasp string or wire. These varieties produce straight ten- to twelve-inch fruits. Varieties such as "Burpless Hybrid," 'Sweet Slice' and 'Sweet Success' produce an abundant crop of mild, easily digested cucumbers that need no peeling.

Small-fruited vine squashes such as acorn, butternut, buttercup and crookneck will grow well vertically but do require more manipulation. With vines reaching six feet or more in length, the weight of the plant alone could topple your structure. Be sure your supporting structure is securely placed in the ground and is tall enough (at least six feet). Train the vines through the mesh or cross-ties and support each developing fruit with a sling.

Growing vine crops on trellises have many advantages in addition to conserving space. Vegetables are kept off the wet ground which may harbor pests such as slugs and sowbugs and the increased air circulation can reduce the introduction of diseases.

Lynn Thompson
Community Gardens
Coordinator at
Denver Botanic Gardens



'Charentais Improved' is a

African Violet Society, 4th Thurs. of 7 months; Bonsai Society, 1st & 3rd Tues; Cactus & Succulent Society, 2nd Tues.; Civic Garden Club, 1st Fri.; Colorado Native Plant Society, 4th Wed.; Dahlia Society, 2nd Fri.; Gladiolus Society, call for info.; Gloxinia Gesneriad Growers, 1st Sat.; Hemerocallis Society, 3rd Sun. of 4 months; Ikebana International, 4th Fri.; Indoor Light Gardening Society, 3rd Thurs.; Iris Society, spring & fall dates; Men's Garden Club, 4th Thurs.; Mycological Society, 2nd Mon.; Orchid Society, 1st Tues.; Rock Garden Society, 3rd Wed.; Rose Society, 2nd Thurs.; Ultra Violet Club, 4th Mon.; Water Garden Society, 2nd Sun. of 5 months

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Denver, CO

African Violet Show and Sale



NEWS

1986 Annual Plant and Used Book Sale, May 9-10

Balloons, music, entertainment, food vendors and, of course, thousands of flower and vegetable plants for sale will give the 22nd Annual Plant and Used Book Sale a new air of excitement. Never before has there been so much offered at this yearly event. On Friday and Saturday, May 9 and 10, from 9:30 a.m. until 5:30 p.m., all visitors will be admitted without charge to explore 20 acres of festivity and plant diversity.

Houseplants will be found inside John C. Mitchell II Hall; the Gift Shop will be open and 10,000 used books, priced from 25¢ to \$50, will be found in the lower level of the Helen Fowler Library.

Outside, the entire grounds of the Gardens will be filled with sale plants from many different categories. A large number of the items for sale have not yet been introduced to the region by retail nurseries and can only be found at the Gardens' plant sale. (They can also be found growing at the Gardens.) This is especially true of the rock alpine garden selection. Twenty corporate exhibitors will be on hand to display their products.

Parking may have been a problem in the past—but not this year! Plant sale shoppers can enjoy two lots, one across from our gate between York and Josephine Streets, and the other at Congress Park. Both provide parking exclusively for the plant sale. Buyers may drive to the north entrance at Gaylord and 11th, the south entrance at York Street and 9th, or on York Street between

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Inside:

Increase in membership fees page 3

Art in the Gardens page 5

Classes for adults page 7

Dr. Dirk Van Neenan, a floral designer from Holland, at the 1985 Floral Design Show

Spring Floral Exhibition and Design Demonstration April 12 and 13

United Floral Industry of Colorado in cooperation with Denver Botanic Gardens will present "A Celebration of Spring" Saturday and Sunday, April 12 and 13 in John C. Mitchell II Hall. This annual show has become extremely popular with Botanic Gardens members and retail florists alike, and this year it takes on a new look with some special events.

The floral demonstration program will be offered in two two-hour

sessions beginning at 2 p.m. both Saturday and Sunday. The panel of three designers, all local United Floral Industry members, will be demonstrating the newest in high fashion design trends using many flowers grown right here in Colorado.

Pam Anderson, instructor with Academy of Floral Design School in Denver, will be commentator for the event. Her experience and knowledge is extensive and she will

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Plant and Book Sale

continued from page 1

11th and 9th for plant pick-up.

A diverse selection of plants from bromeliads to tomato plants to penstemons will line the walkways and fill the halls on these two days.

All proceeds from the Annual Plant and Used Book Sale benefit Denver Botanic Gardens. And don't forget this is held on Mother's Day weekend, just in time to find a special plant for your gift-giving needs.

Tributes

In memory of Margaret Elizabeth Roman Andrikopoulos

Mr. & Mrs. Pete J. Kithas

In memory of Mrs. Karl (Helen) Arndt

Mr. & Mrs. Edward Levy

In memory of Mrs. Gerald (Betty) Bachar

Mr. & Mrs. Edward Levy

In memory of William K. Brown

Mr. & Mrs. John A. Atkinson

In memory of Forrest C. "Duke" Claycomb, Sr.

Mr. & Mrs. William B. Collister

In memory of Ms. Ada Elzi

Elizabeth Heacock

In memory of Alice W. Gagel

Dorothy Bonewell

John & Fran Regner

Marie Regner

In memory of Ann Habas

Jane Frey

In memory of Bertha Hennessy

Arvada Womans Club

In memory of Edward "Ned" Marshall

Mr. & Mrs. D. H. Buchanan, Jr.

Dr. & Mrs. F. A. Garcia

Mr. & Mrs. William R. Howell

Christa B. Jordan

Mr. & Mrs. Edwin P. Van Cise

In memory of Dr. Gordon Murray

Mr. & Mrs. John A. Atkinson

In memory of Frederic "Greg" Pannebaker, Jr.

Francis Bain

Walter Bain

Gloria Borglum

Mr. & Mrs. Mackintosh Brown

Vestal L. Brown

George H. Curfman, M.D.

Mr. & Mrs. Charles W. Ennis

Violet G. Evans

Friends of the Press Club

Mr. & Mrs. Rex F. Gregory, Jr.

Mr. & Mrs. Francis N. Kirchhof

Mr. & Mrs. Robert M. Korb

Mr. & Mrs. William R. Martin

Mae E. McGill

Mr. & Mrs. Gilbert Pannebaker

Mr. & Mrs. Rush Razee

Mr. & Mrs. Ettore T. Scena

Mr. & Mrs. William A. Sidwell, Jr.

Cosby D. Thomas

Dr. & Mrs. Karl J. Weggener

Mrs. Eva M. Waterman

In memory of Kim Sterne

Mr. & Mrs. Bruce C. Sterne

In memory of Mrs. Takino Takematsu

Ikebana International

In memory of Francis Webb

Friends at Lakewood Medical Offices

In memory of Mary Ann Wesesku

Geraldine M. Pesak

*Volunteer
Velma Disbrow
setting up for
the 1985
Annual Plant
and Used Book
Sale.*



Spring Floral Design

continued from page 1

offer many design tips in the floral industry with special emphasis on the care of cut flowers.

There is a \$2 per person admission charge for each program and the regular non-member gate fee will be in effect.

In the Lobby Court members of United Floral Industry will be showing their individual artistry with fresh plant and floral arrangements. Over 40 florists will be represented in the exhibition and many different design styles will be featured. There is no charge for this exhibit.

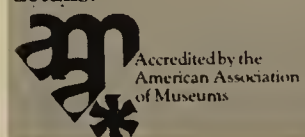
Please remember the dates, April 12 and 13, to celebrate the arrival of spring with expert floral designers and savor the delicate fragrance of flowers of the season.

Green Thumb News Number 86—4 April 1986

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than March 20 for May, April 18 for June and May 20 for July.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.



New Membership Fees and New Membership Category and Benefits Approved

During their January meeting the Board of Trustees approved a recommendation by the Membership Committee to change fees for five membership categories, add a new membership category and add additional benefits for certain categories. The decision to make these changes was based on an evaluation of the cost to DBG of providing existing membership benefits. The increase, which is modest, will take effect April 15, 1986.

Because your membership is important to us, we are offering you the opportunity to renew your present membership at the old rate until June 30. This is for any member whose renewal date is in 1986.

Those categories affected by the new fees are as follows:

	New Rates	Previous Rates
Student	\$18	\$15
Senior	18	15
Senior Couple	25	20
Individual	25	20
Family/Dual	35	30

The benefits of the \$18-\$35 membership are as follows:

1. Free admission to the Gardens
2. *Green Thumb News*
3. *The Green Thumb* quarterly magazine
4. Use of the Helen Fowler Library
5. Discount and advance notice of classes, field trips and tours
6. Reduced rate on Garden concerts
7. Plant giveaway
8. Invitations to special member activities
9. Dr. Green

New Membership Category/ Additional Benefits

Be an **Advocate** of the Gardens. A new benefit of membership at this level (\$300), or the levels of Patron (\$500) and Benefactor (\$1,000), will be two season tickets per membership to the summer Garden Concerts. The number of tickets available will be limited to 250 pairs. Your tickets will be mailed 10 days prior to each concert, and they may be used by you or given to a friend if you are unable to attend the concert. Additionally, as an Advocate member, you will be allowed to bring up to six guests with you when you visit the Gardens (not applicable to concerts).

For the following membership categories Family Guest Passes will be given. These passes, good for one visit each, are for you to give to friends, relatives and guests to use to enjoy a trip to the Gardens.

Contributing	2 Family Guest Passes
Supporting	4 Family Guest Passes
Advocate	4 Family Guest Passes
Patron	4 Family Guest Passes
Benefactor	4 Family Guest Passes

The Membership Committee is continually exploring new ways of increasing your benefits of belonging to the Gardens. Look for the announcement of new benefits in future issues of the *Green Thumb News*.

With the last issue of our newsletter, you received your 1986 Calendar of Events. As you can see, many exciting events will be happening at the Gardens this year and we hope you will participate in as many as you can.

Your membership is *important* to us. It is welcomed and encouraged and your additional giving allows us to continue the vision of the Gardens' founders to create and then insure the future of a great Botanic Gardens for the Rocky Mountain Region.

"Circle 17" for 1986

Seven "Free Days" in 1986 have been set aside for Denver City and County residents who wish to discover Denver Botanic Gardens. As in the past you can circle "17" on your calendars for all months except August and December. This year's free days are:

Thursday, April 17
Saturday, May 17
Tuesday, June 17
Thursday, July 17
Wednesday, September 17
Friday, October 17
Monday, November 17.

The Gardens encourages all DBG members to bring, as their guests, non-member Denver residents to visit on one or all of these free days. It is an ideal way to introduce the joys and privileges of a Botanic Gardens membership to those who may be unaware of all that the Gardens has to offer. Furthermore, these days reveal a wide array of enjoyable garden seasons—from the early budding of spring to the profuse display of summer to the quiet splendor of winter.



Outdoor gardening volunteer Nan Burnett preparing calla tubers.

"Around the Seasons" Seeks Members

Every November a popular feature of DBG's Holiday Sale attracts hundreds of shoppers to the Gardens. These shoppers have an artistic eye for floral arrangements and for innovative uses of dried plants. However, few realize that all of this material is provided by the Around the Seasons club.

Throughout the flowering season they gather flowers from gardens and dry them in special ways to maintain their colors.

Originally, this club ordered and dealt with all of the plants (except herbs and donated plants) for our Annual Plant and Used Book Sales. Now they help fund and maintain DBG's Cutting Garden, in addition to harvesting plants for drying.

The Cutting Garden is a display of materials that are used fresh for arrangements or dried for lasting bouquets. It is located by the Aquatic Plants Display and consists of an interesting blend of perennials, ornamental grasses, annuals, shrubs and small trees.

Throughout the growing season Around the Seasons' members can be found clipping, pruning and nurturing this special garden. They are in need of help this year and if you would like to join this group of industrious, cheerful gardeners call Dorothy Scott, 526-0726, or Liz Schermerhorn at 791-0553.

DBG Guild Seeks New Members

Denver Botanic Gardens Guild members belong to one of the Gardens' first active volunteer groups. In 1960 they began as the DBG Junior Committee and in 1963 they began to study herbs. This study led to their sponsoring a model herb garden at DBG.

Since the early 1960s the Guild has expanded to experiment with the use of herbs. At Holiday Gift Sales visitors have rushed to purchase the Guild's prize herb vinegars and at last year's sale they offered a variety of herb products including pesto. Members planted and grew herbs in addition to those in the Herb Garden which they sold at the annual plant sales. Proceeds from these sales have benefited the Gardens.

On Wednesday, May 21, at 10 a.m., the Guild is having a coffee in the Herb Garden Gazebo to explain their current projects and how the Guild contributes to the Gardens. The Guild has invited anyone interested in membership or learning more about this organization to attend this coffee. Please R.S.V.P. by mailing your name, address and phone number to Denver Botanic Gardens Guild, 909 York Street, Denver, CO 80206. You need not be a DBG member to accept this invitation, but instead should be willing to be an active member of this organization.

Alpines '86 Conference Scheduled

Denver Botanic Gardens, along with the American Rock Garden Society and its Rocky Mountain Chapter, will host the Second Interim Rock Garden Conference in Boulder, June 28 to July 2, 1986.

This is perhaps the greatest meeting of rock garden enthusiasts ever to come to Colorado. There are 600 delegates from all over the world and it is an opportunity for you to participate in this fine event or perhaps help us with the multitude of items needed to be done.

DBG's Assistant Director Andrew Pierce and chairman of Alpines '86 has details on all of the ways you can assist in this historical event so please contact him at 575-3751 for further information.



RSVP Offers Volunteer Opportunities

If you like to do woodworking, clerical work, writing articles, sorting clothes, or any number of other different jobs, the Volunteers of America Denver Retired Senior Volunteer Program is for you. The Retired Senior Volunteer Program, also known as RSVP, offers opportunities for people 60 years of age and older to use these skills.

Volunteers can choose to assist at any of more than 70 volunteer sites throughout Denver and part of Arapahoe County. Denver Botanic Gardens is one of the RSVP sites. Currently 13 RSVP Volunteers are working at the Gardens.

If you are interested in pursuing volunteer work or learning more about the benefits of being an RSVP Volunteer, please call 623-8052.





Plant Sale Poster Contest and Reception

Out of several hundred photos of artwork submitted to the Gardens for the annual sale's Art in the Gardens contest, the judges chose 59 originals to investigate.

The quality was high and there were many which would have made good posters. After almost three hours of deliberation and discussion over lunch, the judges unanimously chose Carolyn Crawford's pastel of white orchids with books. It is a simple, beautiful piece that will make an elegant poster.

The judges for Art in the Gardens were Merle M. Moore, Executive Director for DBG; Richard Teitz, Executive Director of the Denver Art Museum; Greg Geissler, Commissioner on Cultural Affairs; Lyman Jackson of Jannes Art Publishing (the printer and distributor of the poster); and Virginia Knowlton, Chairman of the 1986 plant sale.

All of the 59 pieces of art brought in for the final judging will be in the art exhibit April 22 to May 5, prior to the plant sale. All of the art is for sale with 30 percent of the sale price benefiting the Gardens.

The Board of Trustees of DBG and the Plant Sale Committee cordially invite all Gardens' members to attend the Opening Reception for Art in the Gardens on Tuesday, April 22 from 6 until 9 p.m. At this time you can meet the winning artist and obtain autographed copies of the poster at a special price. The Conservatory will be open on this gala evening and tickets are \$10 per person (these tickets are tax-deductible); refreshments will be served. Please respond by April 17 by returning the form below.

Plant Donations Needed

The Plant Donations Booth is a traditional feature of our Annual Plant and Used Book Sale. This booth is designed to solve a multitude of gardening needs from undeveloped gardens with freshly cultivated soil to mature gardens that need thinning or a slightly new appearance.

Perennial gardeners are encouraged to divide their overgrown specimens and bring them to the Plant Donations Booth on Thursday, May 8 prior to the sale on Friday and Saturday, May 9 and 10.

Please pot these plants as carefully and early as possible, identifying each with labels. They will be gratefully accepted between 9 a.m. and 4:30 p.m. at the Gaylord Street service entrance just south of 11th Avenue.

Your donations will make colorful, hardy additions to developing and new gardens, and you will have made a tax-deductible gift to DBG. If you have any questions call either Dorothy Scott, 526-0726, or Liz Schermerhorn at 791-0553.

Great Getaways—July in Yellowstone and Grand Teton National Parks

Imagine soft warm breezes wafting past an open campfire carrying the aroma of a hearty, home-cooked meal at the end of a day hiking through Yellowstone National Park. Relax to the sounds of water gurgling its white noise past your campsite and birds greeting the evening while fish splash in the nearby stream. Anticipate enjoying this and more—from dramatic waterfalls to unique ecosystems.

From July 12 to 20 Gardens' members will have an opportunity to experience this and more when Edward Connors, President of DBG's Board of Trustees, leads 13 people to Yellowstone and Grand Teton National Parks. A diverse trip is planned that involves horseback riding, river floating, hiking, exploring and much more.

Stops along the way will include the renowned Buffalo Bill Historical Center in Cody, Canyon Village in Yellowstone and Jackson Lake Lodge in Grand Teton National Park. Expect a three-day horseback trip into Yellowstone's southwestern quadrant with Jackson Outfitter Galloway Clover and a river trip down the Snake River.

Tents, three dinners, two lunches, all transportation, lodging and gratuities are provided for in the price of \$645. Bring a sleeping bag and hiking shoes and plan to spend three days on horseback.

This trip to Yellowstone and Grand Teton National Parks will not be arduous, but it will be memorable with a flavor of the West. For additional information direct inquiries to DBG's Assistant Director Andrew Pierce, 575-3751, or to Edward Connors in the evenings at 771-5842.

Lyman Jackson of Jannes Art Publishing judges posters for the Plant and Used Book Sale poster contest.

Art in the Gardens

I am enclosing \$_____ for _____ reservations.

Name(s) _____

Address _____

City _____ State _____ Zip _____

Phone Number _____

Please send to "Art in the Gardens," Denver Botanic Gardens, 909 York Street, Denver, CO 80206 by April 17.

Materials Needed for SKIP Kit

SKIP Kit, School Kids Into Plants, is a special package of preparatory materials designed for use in the primary grades as a one-week unit. This kit is used in conjunction with a guided tour of the Conservatory at the end of the week.

Students in the early grades do not always have the background required to make an educational tour effective so this kit was developed to bridge that gap.

Included are plant materials, books and other printed materials and suggested classroom activities. Unfortunately, books and printed materials tend to wear out after several years of use and need to be replaced. Some items needing replacement are *Ranger Rick* magazines, exotic seed pods and photos of unusual plants.

Donations of any of these items will be accepted for the Guiding Program by Education Assistant Carolyn Knepp, 575-3751 extension 20. These hands-on materials for children spark interest and excitement in your botanic gardens.

Volunteer Outdoor Gardeners Needed

If you love to be outdoors working with plants and if you wish to help make the Gardens even more beautiful for others to enjoy, consider becoming a volunteer outdoor gardener.

On Wednesday, April 16, from 2 to 4 p.m., a meeting will be held at the Botanic Gardens' House at 909 York Street. During this time you can meet the staff, enjoy a tour of the Gardens and learn about the volunteer gardening program. Refreshments will be served.

Interested in Ikebana?

Mr. Toshiyuki Ohki, a Master flower arranger of the famous Sogetsu School of Tokyo, will present a demonstration of Ikebana (Japanese flower arrangement) at Denver Botanic Gardens in John C. Mitchell II Hall, Friday, April 11 from 9 a.m. to noon.

Cost of the demonstration is \$5 and is open to the public. Mr. Ohki's visit is, in part, sponsored by Ikebana International, Chapter 66, and the Denver Branch of the Sogetsu School. It promises to be an informative and cultural event.

Audubon Society's Grassland Institute Program

Denver Audubon Society announces the 12th annual Grassland Institute, to be held June 8-14 at the Pawnee National Grassland near Briggsdale, Colorado. The Institute draws on the arts, sciences and humanities to familiarize participants with the short-grass prairie ecosystem. Field trips and evening programs cover such topics as grassland botany, insects, birds and other vertebrates, geology, meteorology, anthropology and archaeology, and coal mining and land reclamation.

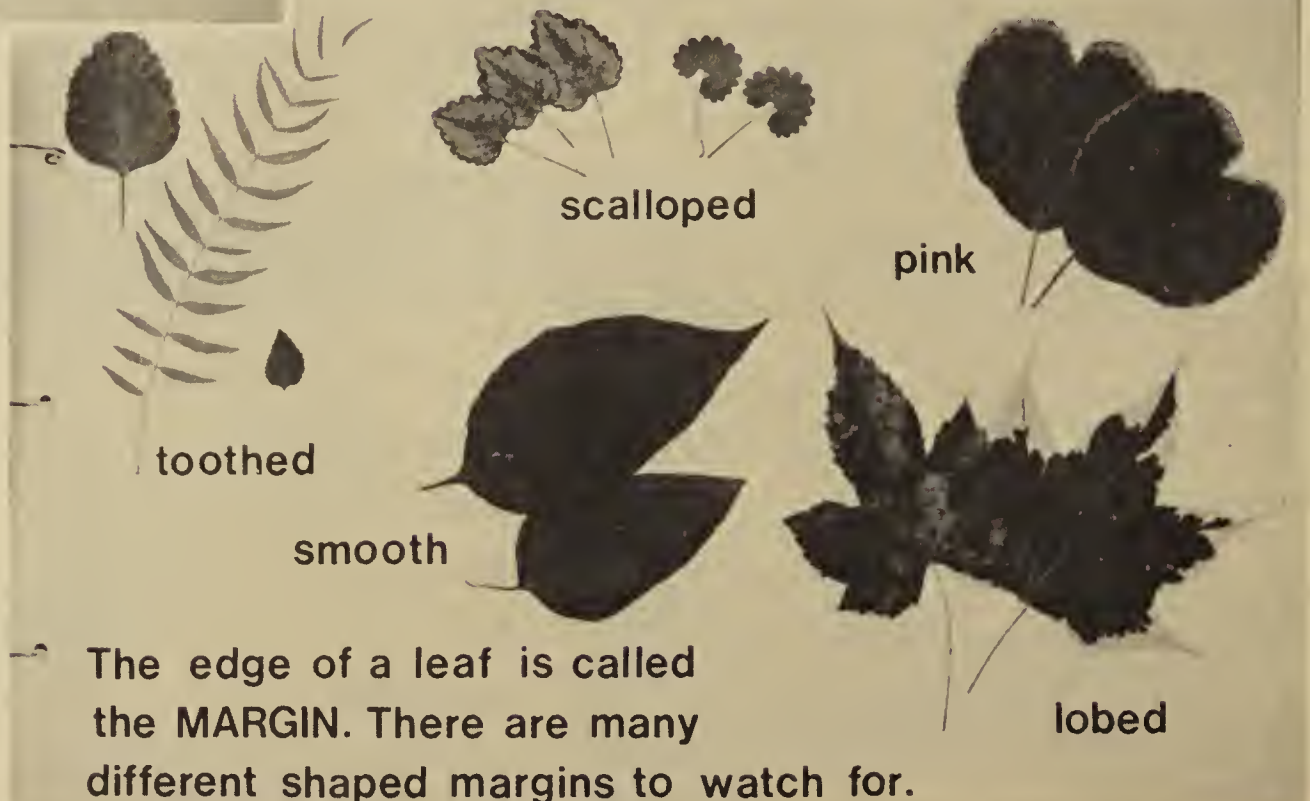
The Institute program is equally suitable for teachers, who may earn graduate credit through the University of Northern Colorado, and for non-professionals with a serious interest in Colorado's distinctive prairie landscape. The curriculum includes an evening of story-telling and a traditional barn dance.

Spring is the liveliest time of year on the prairie. Participants will camp for six nights under the cottonwood trees. Meals, transportation on field trips, and instruction are all included in the tuition of \$250.

To obtain a descriptive folder and registration form, please call Denver Audubon Society at 399-3219.

This leaf is **PALMATELY COMPOUND**.

It has **LEAFLETS** arranged like fingers.



The edge of a leaf is called the **MARGIN**. There are many different shaped margins to watch for.



*Students in the
fall Watercolor
and Mixed
Media Painting
class*

Japanese Tea Ceremony

Section I: Saturday, April 19

Section II: Sunday, April 27

Section III: Sunday, May 11

Section IV: Sunday, May 18

(one session) 2 to 3 p.m.

Tea House in DBG's Japanese Garden

Please indicate your section on the registration form.

Nowhere else in the world is tea drunk with as great a sense of austerity and aesthetic refinement as in the Japanese tea ceremony or *Chanoyu*.

Because of its emphasis on such concepts as harmony, respect, purity, tranquility and elegant simplicity, the tea ceremony has for centuries been considered the epitome of Japanese life. This is an opportunity to experience an authentic tea ceremony in the quiet splendor of our Japanese Garden.

Instructor: Kathryn Kawakami has done much to inform Denver area residents and students about the culture of Japan. She will be assisted by William Crowder who studied the Tea Ceremony in Japan at Ura Senke.

Fee: \$4.50 members/\$5 non-members

Limit: 15

Watercolor and Mixed Media Painting

Section I: Wednesdays, May 14, 21, 28, June 4, 11, 18

9:30 to 11:30 a.m.

Section II: Saturdays, May 17, 24, 31, June 7, 14, 21

1 to 3 p.m.

(six sessions) Classroom B

Please indicate your section on the registration form.

Translate your vision of nature into exciting color! Wet-in-wet techniques as well as painting on dry paper will be demonstrated. From quick gestures to slow contemplative studies, students will explore the rich world of nature at Denver Botanic Gardens. Instruction and demonstrations in assorted media, including pastels, will be provided.

Instructor: Okasana Ross, Ph.D., studied at New York University and Columbia University and has 32 years of teaching experience. She was formerly on the faculty of the University of Colorado at Denver, Metropolitan State College and Colorado Women's College.

Fee: \$48 members/\$53 non-members

Limit: 20

Advanced Wheat Weaving

Wednesdays, April 30, May 7, 14, 21 (four sessions)

7 to 9 p.m. Classroom B

This series of workshops is a continuation of the wheat weaving course held last fall. Advanced techniques for larger, more complicated projects such as house blessings, brides-of-corn and harvest dolls will be taught. Experience with different grains such as Italian and brown-bearded wheat, oats and barley will be provided.

Either the instructor's consent or previous enrollment in a wheat weaving course is necessary. Please bring scissors and a ruler to class.

Instructor: Maureen McGowan is a horticultural instructor and consultant who has taught various craft classes, including wheat weaving, at the Chicago Botanic Gardens and DBG.

Fee: \$46 members/\$51 non-members (includes a \$14 materials fee)

Limit: 12

CLASSES

Spring
1986
Denver Botanic Gardens



Grow
artichokes this
summer.



Gardening for Results

Saturdays from 10 a.m. to noon at DBG's Morrison Horticultural Demonstration Center at 2320 East 11th Avenue; entrance is on 11th Avenue.

Please indicate your program titles if you are not attending the entire series.

Professional horticulturists will present the background and techniques needed to achieve beautiful and bountiful gardens in this series of programs. Attend them all or choose those that suit your specific needs.

Saturday, April 19

The Small-Space Vegetable Garden

Techniques such as wide-row spacing, successive planting and intercropping will help you grow more produce in your city garden than you ever thought was possible. Learn sources of appropriate varieties.

Saturday, May 3

The Culinary Herbs

This class is an introduction to the culture and uses of the cooking herbs. Plan an herb garden or use them to accent your annual beds or perennial borders as well as enhance your summer meals.

Saturday, May 24

All About Tomatoes

Everything you need to grow our favorite garden vegetable will be presented. Topics include determinate and indeterminate varieties, planting, pruning, fertilizing and problems such as aphids, whiteflies, sunscald and blossom end rot.

Instructors: Pat Pachuta and Lynn Thompson are horticulturists on the staff of Denver Botanic Gardens.

Fee: Each program is \$8 or attend all three for \$20.

Intensive Vegetable Gardening Workshop

Section I: Saturday, April 26
(Rain date—Sunday, April 27)

Section II: Saturday, May 17
(Rain date—Sunday, May 18)

(one session) 10 a.m. to 2:30 p.m.
DBG's Morrison Center; 2320 East 11th Avenue, Denver

Please indicate your section on the registration form.

This is a hands-on approach to intensive techniques for growing vegetables. Students will learn garden design, planning and appropriate varieties and will then work outside and go through the actual process of soil preparation and planting using special methods such as wide-row spacing.

Dress appropriately in work clothes and practical shoes and don't forget to bring a lunch.

Instructor: Lynn Thompson

Fee: \$16 members/\$17.50 non-members

Limit: 12

Deciduous Flowering Shrub and Ornamental Trees for Colorado

Tuesdays, April 29, May 6, 13, 20, 27
from 7:15 to 9:15 p.m.

and Field Trip on Saturday, May 24
from 9 a.m. to noon
(six sessions) Morrison Center

The emphasis of this course will be on identifying and examining the landscape value of over 75 species of deciduous flowering shrubs and ornamental trees that are hardy in the Denver area. Through the use of slides, students will observe the plant material while the instructor discusses their cultural requirements.

Instructor: An experienced teacher, Jeffrey Frank studied landscape architecture at Pennsylvania State University and the University of Virginia, and is presently employed as a landscape architect at Donald H. Godi & Associates, Inc., in Denver.

Fee: \$45 members/\$49.50 non-members

How to Grow Unusual Vegetables

Wednesday, April 30

(one session) 7 to 9 p.m.

DBG's Morrison Center; 2320 East 11th Avenue, Denver

Learn about a wealth of unusual vegetables you can grow in Colorado just in time to plant them. The culture of artichokes, amaranths, blue corn, cardoon, mache, garbanzo beans, leeks, celery, edible chrysanthemum and others will be covered in detail. In addition, students will learn about the many kinds of peppers and Chinese vegetables. Growing these exotics is certain to enliven your summer meals!

Instructor: Lynn Thompson is a horticulturist who coordinates DBG's Community Vegetable Gardening Program. She has taught many classes on topics pertaining to home vegetable gardening in Colorado.

Fee: \$8 members/\$9 non-members

Water Gardening for Colorado

Wednesdays, April 30, May 7, 14
(three sessions)

7 to 9 p.m. Classroom C

With such diverse plants as the smallest flowering plant in the world (*Wolffia* sp.) and the giant water platter (*Victoria* sp.), the world of aquatic plants offers excitement to both professional gardeners and amateurs. The content of this "how-to" course includes: water gardening history; pool design and construction; variety selection, cultivation and display; hardy and tropical bog plants; half-barrel displays; the culture of the Victoria water lily as well as floating plants; sources of plant material; and special problems.

Through slide presentations, demonstrations and discussions, learn to incorporate these unusual plants into your home landscape.

Instructor: A Gardener Florist II at Denver Botanic Gardens, Joseph V. Tomocik maintains our Aquatic Plant Display and enjoys sharing his enthusiasm for these "wet wonders" of the plant kingdom with others.

Fee: \$24 members/\$26.50 non-members

Ground Covers and Vines for Your Garden

Wednesday, May 7

7:15 to 9:15 p.m.

and Saturday, May 10

Field Trip from 9 a.m. to noon
(two sessions)

DBG House on May 7

This class will focus on over 30 evergreen and deciduous ground covers and vines for Denver area gardens. The ornamental and distinguishing characteristics of each species will be illustrated through the use of color slides. A discussion of their natural history, hardiness and culture will also be included and a field trip will provide a first-hand look at some of the individual plants.

Instructor: Jeffrey Frank

Fee: \$13 members/\$14.25 non-members

Plant Life Field Trip: Red Rocks Park

Wednesday, April 16

9 a.m. to 2 p.m.

This is an opportunity to observe some of the delightful early spring wildflowers of Red Rocks Park. Sagebrush buttercups, Easter daisies, spring beauties, Oregon grape and some of the mustards should all be in flower. Bring a lunch.

Leader: Mary Edwards is an enthusiastic botanist who volunteers in the Kathryn Kalmbach Herbarium at DBG.

Meet: at 9 a.m. at Denver Botanic Gardens House to carpool and share gasoline expenses.

Fee: \$2 per person

Limit: 20

Field Trip to Roxborough State Park

Saturday, May 3

1:30 to 4 p.m.

Learn spring wildflower identification at this spectacular park. An easy trail winds through striking geological formations where a wide variety of habitats including sunny, open hillsides, hogback ridges and a moist stream valley will be explored.

Leader: Bob Heapes is an experienced field trip leader and nature photographer and is also a volunteer naturalist at Roxborough State Park.

Meet: at 9 a.m. at the intersection of Roxborough and Rampart Roads. Each car entering the park must purchase a daily user pass in addition to the field trip fee.

Fee: \$2.50 members/\$3 non-members

Limit: 20



Denver Botanic Gardens
909 York Street
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

Registration Form for Classes and Field Trips

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Address _____

City _____ State _____ Zip _____

Home Tel. No. _____ Business Tel. No. _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No

Appalachian Basketry Techniques

Thursdays, April 24, May 1, 8, 15, 22
6:30 to 10 p.m. except April 24 when
the class begins at 6 p.m.

(five sessions)

DBG's Morrison Center; 2320 East
11th Avenue, Denver

Learn the traditional Appalachian egg basket and some of its variations. The gracefully shaped baskets originated in Scotland and came to America with the Highland settlers. Students will learn this rib and split technique in a variety of shapes and can expect to complete one basket each session.

Please bring a towel and clippers (or pruning shears).

Instructor: Robin Taylor Daugherty is a fiber artist with considerable teaching experience; she has taught weaving, spinning, felting, tapestry-making and basketry throughout Colorado and her work is exhibited widely.

Fee: \$95 members/\$105 non-members (includes \$35 for the construction of five baskets)

Limit: 10

Wicker Basketry Techniques

Thursdays, April 24, May 1, 8, 15, 22
12:30 to 4 p.m. except April 24 when
the class meets until 4:30 p.m.

(five sessions)

DBG's Morrison Center; 2320 East
11th Avenue, Denver

Wicker basketry is a technique of weaving that usually employs reed, willow or rattan. Students in this course will use reed to make a variety of baskets in oval and round shapes and can expect to complete one basket each class session.

Please bring a towel, clippers (or pruning shears) and an awl.

Instructor: Robin Taylor Daugherty

Fee: \$95 members/\$105 non-members (includes \$35 materials fee for the construction of five baskets)

Limit: 10



Basketry Workshop: Round Spoke and Split Basket

Tuesday, April 22

(one session)

9 a.m. to 4 p.m.

DBG's Morrison Center; 2320 East
11th Avenue, Denver

Learn how to make a traditional Appalachian spoke and split basket in this one-day workshop. In it, a series of flat splits radiate outward from the center of the basket's bottom. As it is worked upward, it can take a variety of shapes, all of them round.

No previous experience is necessary and students can expect to complete a basket 11 inches across and 12 inches tall (includes handle). Please bring sandpaper, a jackknife or pocket knife, an awl, knitting needle or very large nail, spring-type clothespins, an old towel, kitchen or pruning shears and a sack lunch.

Instructor: Robin Taylor Daugherty

Fee: \$28 members/\$31 non-members (includes \$8 for materials) **Limit:** 10

Basketry Workshop: Market Basket

Section I: Tuesday, May 6

Section II: Saturday, May 10

(one session) 9 a.m. to 4 p.m.

DBG's Morrison Center; 2320 East
11th Avenue, Denver

Please indicate your section on the registration form.

Learn how to make a traditional New England market basket using the square to round technique. The basket has a slightly open bottom for good ventilation and firmly woven sides in a twill pattern. The result is an ideal gift that lends itself to a wide variety of uses.

No previous experience is necessary and students can expect to complete a basket approximately 8 inches by 12 inches. Please bring sandpaper, a jackknife or pocket knife, an awl, knitting needle or very large nail, spring-type clothespins, an old towel, kitchen or pruning shears, small hammer and a sack lunch.

Instructor: Robin Taylor Daugherty

Fee: \$28 members/\$31 non-members (includes \$8 for materials)

Limit: 10



Round spoke and split basket by Robin Taylor Daugherty

Market basket by Robin Taylor Daugherty

Appalachian baskets on ends with two wicker baskets in center by basketry student Carol Knepp



Gardening Tips for April

Among the oldest of the cultivated plants, herbs have long been used for culinary purposes. Their attractive forms and colors make them ideal garden subjects and discerning cooks are discovering that nothing can compare to their freshly harvested flavor. Those accustomed to the dried, store-bought variety will find the fresh counterpart a very pleasant surprise.

With a good sense of design and proper culture, herbs can be some of the most pleasing of garden plants. Many of them resist drought, require very little care and may actually repel insects.

To grow them successfully, provide bright light or sunlight for at least 4-5 hours a day. Some herbs, such as chervil and mint, will tolerate a shady location. The most important site consideration is their need for a well-drained soil. The southern hillsides of many Mediterranean countries such as Spain and France are carpeted with wild stands of lavender, thyme and rosemary; these plants flourish in very dry, even gravelly soil.

Herbs can make use of the smallest amount of nutrients a soil has to offer and moderate feedings of a 5-10-5 fertilizer once or twice a year will keep them healthy. Too much fertilizer results in the production of very lush foliage with small amounts of essential oils. This is hardly desirable since it is these oils that provide the tang and aroma so appealing in a mint julep or a glass of May wine.

Herbs should be mulched to keep the leaves clean, decrease weed production and hold valuable soil moisture and deep waterings will discourage shallow roots.

Herb gardens may be formal or informal in style and designers should consider other ways of displaying them in addition to gardens that consist solely of herbs. Formal herb gardens were popular in the Middle Ages and are characterized by very symmetrical designs often with geometric patterns. Precise edges are important and can be maintained through the use of bricks, logs or stones. Sundials or pieces of sculpture are usually featured as focal points in these gardens.

The Elizabethan formal garden was typically a knot garden. Carefully cropped and manicured plants are situated to form an interwoven ribbon pattern that resembles the effect of "knots." Needless to say, knot gardens, while indeed striking

and dramatic in the landscape, are terribly demanding, time-consuming undertakings. Denver Botanic Gardens' Herb Garden presents a unique, well-planned alternative: the curving "knot" design is provided by brick paths that meander around the herbs.

Informal herb gardens, however, are my personal favorite. These are more free-form with irregularly spaced, more "natural" plantings. Consider, for example, the old-fashioned English cottage garden at the back door with its huge clumps of hollyhocks, foxglove and lavender. Informal gardens are far easier to maintain because many herbs have a rambling, profuse nature that can be encouraged; formal gardens rely on repeated pinching and pruning to keep the plants tidy and under control.

If you have limited space or are just beginning to experiment with herb cookery, think about adding

railroad tie steps with it. The sensuous pleasure of fragrance in the garden is well worth planning—both gardens are especially delightful in the evening.

Similarly, green and white variegated mints and golden sages can be extremely decorative as well as tasty additions to the perennial border. Because of the fragrance and color of their flowers, many herbs attract butterflies and bees to the garden. Such a flurry of activity invariably accompanies a clump of *Monarda didyma*, or bee balm, as it shimmers in the summer sun. *Melissa officinalis*, or lemon balm, is so-called because its genus name means "beloved by bees!"

When planning an herb garden, get a sense of your likes and dislikes by studying herb books and catalogs. The Helen Fowler Library of Denver Botanic Gardens has a good collection that will provide a wealth of insights. Visit as many



Pruning basil for pesto.

herbs to other existing gardens in your yard. Low-growing herbs such as the frilly variety of curly parsley make pretty borders in an annual bed. Similarly, masses of burgundy-foliaged 'Opal Basil' were impressive attention-getters when displayed along the east side of Denver Botanic Gardens several years ago. Even in our Rock Alpine Garden, many thymes and oreganos cascade with a simple natural beauty over rockwork.

Spreading herbs such as chamomile and the creeping thymes make delightful ground covers especially when planted between stepping stones. The DBG staff is well aware of this: Executive Director Merle Moore has filled the cracks of his flagstone patio with creeping thyme and Assistant Director Andrew Pierce has planted the pockets of the treads of his

herb gardens as you can (preferably with a small notebook to record observations), and remember the basics of a sunny, well-drained location. You might also keep in mind that our Annual Plant and Book Sale, scheduled for May 9-10, 1986, always includes a well-stocked Herb Booth with over 50 varieties available.

Patricia A. Pachuta
Education Director at
Denver Botanic Gardens

C A L E N D A R

Regular Meetings of Plant Societies
A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

African Violet Society, 4th Thurs. of 7 months; Bonsai Society, 1st & 3rd Tues; Cactus & Succulent Society, 2nd Tues.; Civic Garden Club, 1st Fri.; Colorado Native Plant Society, 4th Wed.; Gloxinia Gesneriad Growers, 1st Sat.; Hemerocallis Society, 3rd Sun. of 4 months; Ikebana International, 4th Fri.; Iris Society, spring & fall dates; Men's Garden Club, 4th Thurs.; Mycological Society, 2nd Mon.; Orchid Society, 1st Tues.; Rock Garden Society, 3rd Wed.; Rose Society, 2nd Thurs.; Ultra Violet Club, 4th Mon.; Water Garden Society, 2nd Sun. of 5 months

S	M	T	W	T	F	S
		1 Botanical Illustration—Spring Notecards	2	3	4	5 Cactus and Succulent Show and Sale, Watercolors
6 Cactus and Succulent Show and Sale, Winter Botany on Snowshoes	7	8	9	10 Perennial Pleasures	11	12 Spring Floral Exhibition "A Celebration of Spring"
13 Spring Floral Exhibition "A Celebration of Spring"	14	15	16 Plant Life Field Trip: Red Rocks Park	17 Free Day for Denver City/County Residents	18	19 The Small-Space Vegetable Garden, Japanese Tea Ceremony
20 April 20-May 5 "Art in the Gardens"	21	22 Basketry Workshop: Round Spoke and Split Basket	23	24 Appalachian Basketry Techniques, Wicker Basketry Techniques	25	26 Intensive Vegetable Gardening Workshop
27 Japanese Tea Ceremony	28	29 Deciduous Flowering Shrubs and Ornamental Trees for Colorado	30 Wheat Weaving, Water Gardening, Unusual Vegetables			

Coming Next Month

May 3 Culinary Herbs, Field Trip to Roxborough State Park	May 6 Basketry Workshop: Market Basket	May 9-10 Annual Plant and Used Book Sale	May 11 Japanese Tea Ceremony	May 17 Free Day for Denver City/County Residents, Intensive Gardening, Watercolors	May 18 Japanese Tea Ceremony	May 31-June 1 American Iris Society Show and Sale
	May 7 Ground Covers and Vines for Your Garden	May 10 Basketry Workshop: Market Basket	May 14 Watercolor and Mixed Media Painting		May 24 All About Tomatoes	

Denver Botanic Gardens, Inc.
 909 York Street
 Denver, Colorado 80206
 303-575-3751

April 1986

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 Address correction requested



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NEW S

Mark May 9-10 on Your Calendars: It's Plant Sale Time

The 1986 Annual Plant and Used Book Sale is shaping up to be something really special. Over 50,000 plants will be for sale throughout the Gardens, from 9:30 a.m. to 5:30 p.m. on both days, allowing guests to see the extent of the Botanic Gardens and the many different display beds. Inside John C. Mitchell II Hall the indoor plants will be sold and the 10,000 used books are, as usual, downstairs from the Library.

Colorful balloons, banners, music, food vendors and raffle tickets will all give this year's plant sale a festive air. Look for other surprises throughout the two days.

The purpose of these ambitious changes is to attract more people to the sale and acquaint them with the Gardens in a way that is interesting and fun, encouraging them to return. It is the Gardens' largest

fund-raiser of the year, with all proceeds going to support its ongoing educational, research and display programs.

Some of the sale items to watch for include:

Perennials—In addition to the favorites of bleeding heart, coral bells, primrose and so forth, there will be a selection of over 30 clematis varieties in a wide range of color and size. Decorative ornamental grasses in 2¼-inch to one gallon size pots will be available. Native and dryland specialties will feature penstemons, anemones, dwarf goldenrod, poppies and cone-flowers. These plants will be clearly marked for suitability to sun and shade. A resource directory will provide buyers with planning and maintenance ideas.

Houseplants—This year the sec-



Inside:

The Magic of Herbs page 4

Classes for adults page 5

Garden Concert Series page 9

tion will have topiary forms to cover with plant material to make your own animals or geometric shapes. Ready-made forms covered with creeping fig will also be sold. The highlight has got to be Baby Orphan plants—the plant world's answer to Cabbage Patch dolls. With each sealed vial of a tissue-cultured plant comes an adoption certificate and a booklet on "Baby's First Steps"—in other words, how to care for the little orphan. When repotted, the plants grow into full-size adults. Trained personnel will be on hand to help buyers select plants for particular areas. Old standbys of evergreen shell magnets, orchids, bromeliads, miniature hibiscus and other flowering plants will be there for Mother's Day.

Children's Section—This is designed to be a comfortable, convenient area for children to shop with family or friends. These sale plants appeal to children: 'Triple Treat' pumpkin, birdhouse gourds, morning glories, sunflowers. There will be all sizes of planter baskets and a potting wagon.

continued on page 10



Irises Galore May 31-June 1

Come and see the area's finest irises when Region 20 of the American Iris Society holds its 1986 Show and Sale on Saturday, May 31 (from 1 to 4:45 p.m.) and Sunday, June 1 (from 10 a.m. to 4:45 p.m.).

The show is timed for peak bloom of the popular tall-bearded iris, but many other types will also be displayed including standard dwarfs, border, Siberian, spuria, arils and species. New, popular English boxes will attract special interest.

The latest iris introductions by commercial growers will be separately featured. The best of the many hybridizers' seedlings will be displayed and evaluated for a look into new directions in iris development.

Young Audiences Concerts Scheduled

Denver Botanic Gardens will once again host three Young Audiences concerts in 1986. Dates for these concerts are June 17, July 1 and July 15. Watch the June newsletter for details on performing artists who will participate in these "especially for children" musical treats.

*Fun at a 1985
Young
Audiences
Concert*



Consider entering your horticultural stocks or arrangements in the show. Arrangements will glorify the theme, "Under the Rainbow." New this year is the "Ann Noyes Johnson Award" designed to encourage entries from new iris growers and/or growers with a limited number of iris in smaller gardens. Information, including schedules for entering, can be obtained by calling either Ray Lyons at 985-7030 or Jo James at 279-5103.

Those desiring to add to their garden collections should visit the sale table early for the best selection of irises freshly dug from the society members' gardens.

Don't forget to allow time for a stroll through our iris collection before or after the show in John C. Mitchell II Hall. The heady fragrance of this colorful garden is not to be missed.

Tributes

In honor of Kathryn Kawakami
Southern Hills Planters

In memory of Lee J. Ashley
Virginia Beers
Collection Bureau Inc., General
Virginia M. Dorjahn
Ivan & Gloria Ferrell
Solange Gignac
Hammer, Siler, George Assoc., Inc.
Beverly Herbert
J.D. & Pam Leonard
Mr. & Mrs. Michael Mayer &
Jonathan
Denise Murdock & Girls
Beverly M. Nilsen
Sunbonnet Garden Club
Harold Todd & Alice M. Hall Todd
Margaret Wallace
Mr. & Mrs. Robert Weber

In memory of Anne Castiel Chabrol
Mildred P. Yrissari

In memory of Dr. Alfred A. J. Den
Mrs. Alfred Den

In memory of Janet Linstedt
Dick & Mildred Dawson

In memory of J. Kenneth Malo
The Brown W. Cannon Family

In memory of Edward "Ned" Marshall
Florence Allen
AMFAC

Mary Jane Cella
Mrs. John M. Evans
Robert & Wilma Fiori
Bob & Norma Lee Frederic
Mr. & Mrs. Ray Glausser
John & Helen Gnam
Mrs. M. L. Hunter
Mr. & Mrs. M. L. Jameson
Gregg & Lorraine Marshall
John & Ida Martin
Bruce & Ruth Masters
A.Y. McDonald Mfg. Co.
A.Y. McDonald Mfg. Co.,
Customer Service Dept.

RKR Corporation
Maxine Liebundgut Thompson

In memory of Frederic "Greg" Pannebaker, Jr.

Dr. & Mrs. F. A. Garcia
Mrs. Paul W. Kershaw
Dr. & Mrs. Robert G. Mitcheltree

DBG Calendar Changes

Please mark your 1986 Denver Botanic Gardens' Calendar of Events to reflect the following changes: The Garden & Terrace Tour will be held on Saturday, July 26 and the Denver Orchid Society show will be held on September 27-28, 1986.

Great Getaways: 12th World Orchid Congress—Tokyo, Japan, in March 1987

In conjunction with the 12th World Orchid Congress which will be held in 1987, in Tokyo, Japan, the Denver Botanic Gardens is planning a specially designed pre-Congress tour to Southeast Asia for Gardens' members. This "ORCHID ISLES AND ASIAN GARDENS TOUR" will visit Hong Kong, Sabah (North Borneo), Singapore and Thailand. For those tour participants planning to attend the World Orchid Congress, an arrival in Tokyo is planned for Monday, March 16, 1987. Those not planning to attend the Congress will have the options of either returning to the United States on that date or extending their tour by making individual arrangements with Travel Associates.

The tour will depart Denver on Saturday, February 28, 1987, for Hong Kong where we will spend

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Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than April 18 for June, May 20 for July and June 20 for August.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.





*Chinese Junk
photographed
by Merle M.
Moore on last
year's Asian
Tour.*

four days enjoying the sights, sounds and cuisine of the world's most exciting city.

Kota Kinabalu and the incomparable Tanjung Aru Beach Hotel with its beautiful view of the South China Sea from every room is our resting place for an adventure-packed three days in Sabah. A tour of the beautifully landscaped grounds of the hotel and its extensive orchid nursery (guests have fresh orchid blossoms placed on their pillows each night) will be our first order of business. We then hope to visit a gentleman who has been collecting and studying the orchids of Sabah for over 30 years. A day trip to the southern side of the island will include a visit to the Orchid House and the world famous Sepilok Sanctuary (Orangutan Research Center). A tour of the city of Kota Kinabalu will include stops at the gold-domed State Mosque and the beautiful new State Museum.

From Sabah we will fly to Singapore, truly one of Asia's most exciting "garden cities." Here we will visit the Mandai Orchid Garden where thousands of orchids are raised in outside growing beds and

Mr. Ede, Manager of the Gardens, has amassed a most impressive collection of unusual flowering and foliage plants native to the world's warm tropical regions. At the Singapore Botanic Gardens we will have a special behind-the-scenes tour of the orchid breeding program as well as the opportunity to visit the extensive collection of tropical plants displayed there. A day trip out of Singapore will take us to Malaysia to tour rubber and oil palm plantations and visit villages and local marketplaces at the southern tip of the Malay Peninsula. There will, of course, be ample time to enjoy the many and varied shopping and sightseeing opportunities that abound in Singapore as well.

Our next stop will be the "City of Angels," Bangkok, Thailand. The Oriental Hotel (considered the finest hotel in the world) will be our "home" in Bangkok as we spend four days enjoying one of the most colorful and exotic cultures in the Orient. While in Thailand, tours of commercial growers and a private orchid collection are planned in addition to many other adventures in and near Bangkok.

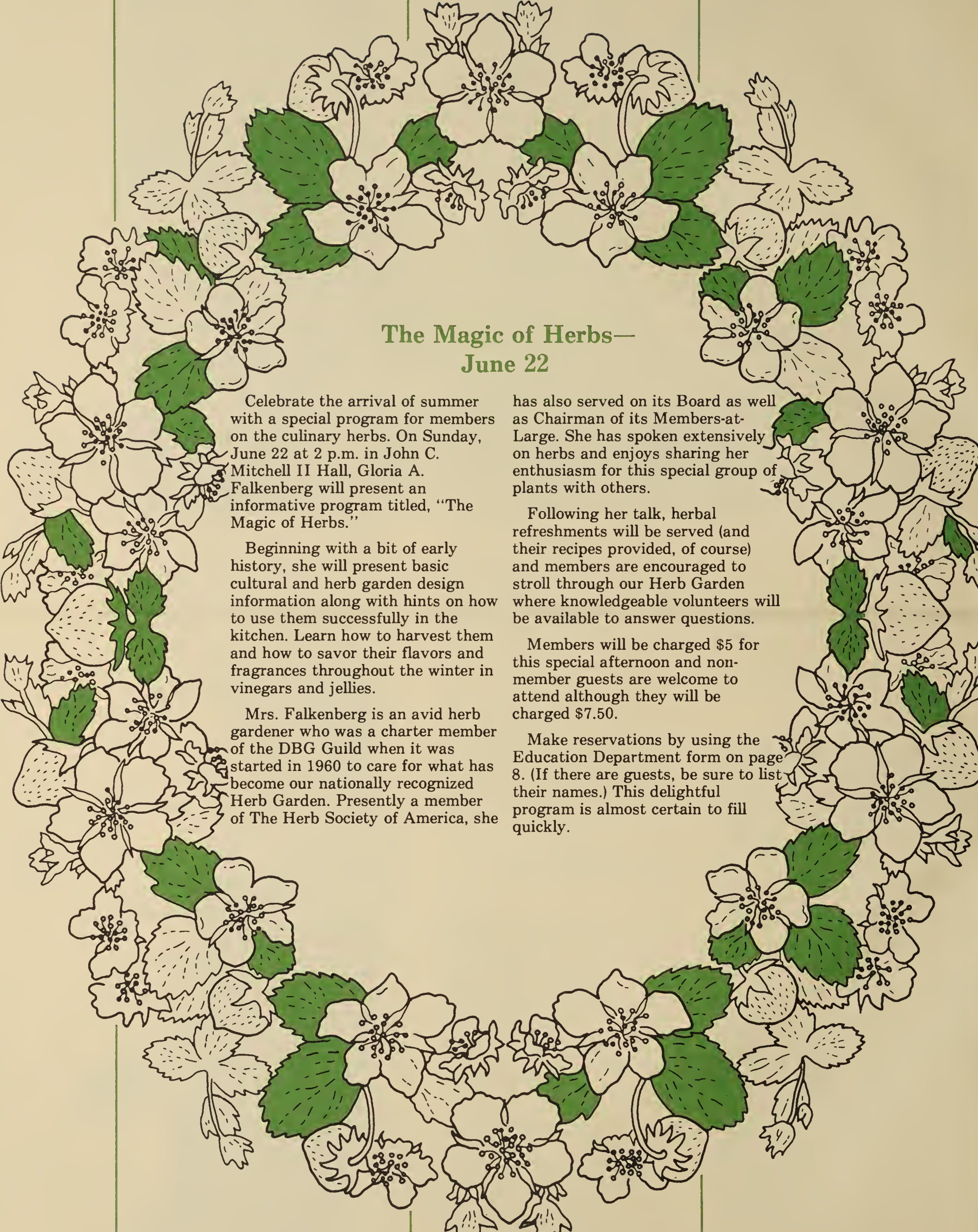
On Monday, March 16, 1987, those who are planning to attend the 12th World Orchid Congress will fly to Tokyo, Japan, where they will be met by a local travel representative and taken to a hotel they have chosen for the Congress. (Orchid Congress fees and accommodations

are NOT included in the cost of the ORCHID ISLES AND ASIAN GARDENS TOUR fees but are the personal responsibility of those attending the Congress.) Your date of departure from Japan will be up to individuals according to the number of days each wishes to spend at the Orchid Conference and any extension in Japan which they may arrange with Travel Associates on an individual basis.

For those on the tour who do not intend to continue on to Japan for the Orchid Congress, they may either return to the United States with no additional costs being incurred or they may make individual arrangements with Travel Associates to extend their tour to a variety of other Asian countries that are easily accessible from Bangkok.

Merle M. Moore, Executive Director, and Larry Latta, Botanist Horticulturist and the Gardens' orchid specialist, will be your guide-escorts from Denver through your arrival in Tokyo, Japan. All costs for the tour will include round-trip air fare from Denver.

For additional information, including a more detailed description of the tour itinerary, costs or tour reservation forms, please contact Travel Associates, Inc., 7007 E. Hampden Ave., Denver, Colorado, 80224, Attn: Ginny Beale. A deposit of \$500 per person, accompanying the completed reservation form, will be required to reserve space on this tour.



The Magic of Herbs— June 22

Celebrate the arrival of summer with a special program for members on the culinary herbs. On Sunday, June 22 at 2 p.m. in John C. Mitchell II Hall, Gloria A. Falkenberg will present an informative program titled, "The Magic of Herbs."

Beginning with a bit of early history, she will present basic cultural and herb garden design information along with hints on how to use them successfully in the kitchen. Learn how to harvest them and how to savor their flavors and fragrances throughout the winter in vinegars and jellies.

Mrs. Falkenberg is an avid herb gardener who was a charter member of the DBG Guild when it was started in 1960 to care for what has become our nationally recognized Herb Garden. Presently a member of The Herb Society of America, she

has also served on its Board as well as Chairman of its Members-at-Large. She has spoken extensively on herbs and enjoys sharing her enthusiasm for this special group of plants with others.

Following her talk, herbal refreshments will be served (and their recipes provided, of course) and members are encouraged to stroll through our Herb Garden where knowledgeable volunteers will be available to answer questions.

Members will be charged \$5 for this special afternoon and non-member guests are welcome to attend although they will be charged \$7.50.

Make reservations by using the Education Department form on page 8. (If there are guests, be sure to list their names.) This delightful program is almost certain to fill quickly.

CLASSES

Spring
1986
Denver Botanic Gardens

Field Trip to Roxborough State Park

Saturday, May 3
1:30 to 4 p.m.

Learn spring wildflower identification at this spectacular park. An easy trail winds through striking geological formations where a wide variety of habitats including sunny, open hillsides, hogback ridges and a moist stream valley will be explored.

Leader: Bob Heapes is an experienced field trip leader and nature photographer and is also a volunteer naturalist at Roxborough State Park.

Meet: at 1:30 p.m. at the intersection of Roxborough and Rampart Roads. Each car entering the park must purchase a daily user pass in addition to the field trip fee.

Fee: \$2.50 members/\$3 non-members

Limit: 20

Plant Life Field Trip: Highlands Ranch

Wednesday, May 21
9 a.m. to 4 p.m.

This is an opportunity to observe some of the delightful early summer wildflowers of the lower foothills. Spiderworts, black-eyed Susans, pink plumes, harebells and penstemons should all be in bloom.

Don't forget to bring your lunch.

Leader: Mary Edwards, a volunteer at the Kathryn Kalmbach Herbarium at DBG, is a botanist who has been leading field trips for eight years.

Meet: at 9 a.m. at the Botanic Gardens House parking lot to carpool and share gasoline expenses.

Fee: \$2.00 per person

Tree Walk at Washington Park

Saturday, June 7
10 a.m. to noon
(one session)

Join an expert and learn to identify many of the beautiful trees on a walk through Washington Park. Huge cottonwoods, golden rain trees, ginkgoes, Eastern wild black cherries, yellowwood and five species of oaks are some of the specimens to be observed.

Leader: Dr. William G. Gambill, Jr., Director Emeritus of DBG, is a former botany and biology professor whose field trips are very popular.

Meet: at 10 a.m. at Washington Park's Marion Parkway entrance on the north end. Cars will be used for travel within the park.

Fee: \$2.50 members/\$3 non-members

Limit: 20



Field trip leader Jan Wingate on a walk at Chatfield Arboretum.

Bird Courtship and Nesting at Chatfield Arboretum

Sunday, June 1
7:30 a.m. to 2 p.m.

Come see yellow-breasted chats, black-headed grosbeaks, Northern orioles, scrub jays and more. Birds of the plains and lower foothills are staking out their courting grounds this time of year. Some woodpeckers, wrens and chickadees may already be on their nests by now.

Learn about the different courtship patterns and who builds the nest. Nests and actual bird specimens will be seen and discussed. Time permitting, students will go on a short walk up Waterton Canyon to see the end of the spring migrants.

Please bring your lunch, drinking water, sunblock, insect repellent, binoculars, notebook, sneakers, rain gear and a field guide to birds.

Meet: promptly at 7:30 a.m. at the main DBG parking lot or 8:10 a.m. at Chatfield Arboretum. If meeting at the Arboretum, park in front of the gate and wait for the group and instructor to come on Deer Creek Road.

Instructor: Tina Jones

Fee: \$8 members/\$9 non-members

Weed Identification

Saturday, June 21
(one session)
10 a.m. to noon Herbarium

Learn to identify the weeds of your lawn and garden. Common weeds will be examined in the lab and a short local field trip will provide a first-hand look at some others. Bring an unknown weed for identification.

Instructor: Janet L. Wingate

Fee: \$8 members/\$9 non-members

Limit: 15



Spring Flora

Thursdays, May 15, 29, June 12
Classroom B
from 7 to 9 p.m.

and

Saturdays, May 17, May 31, June 14
Field Trips
from 9 a.m. to 4 p.m.

(six sessions: three lectures and
three field trips)

Learn basic plant identification with an emphasis on the flowers of major groups and families of flowering plants including conifers, monocots and dicots. Three lecture and laboratory sessions will include some flower analysis using a hand lens.

In addition, three all-day field trips will include stops in the plains, foothills, montane and subalpine vegetation zones, ranging from 5,000 to 9,000 feet, and will allow identification of prominent late spring flowers in the communities visited.

Please bring a small sharp knife and a hand lens and don't forget to

*Pasque flower,
Pulsatilla
patens, by
Emma A.
Ervin*



bring your lunch and something to drink on the field trips.

Meet: promptly at 9 a.m. in the main DBG parking lot to carpool and receive directions for the field trips.

Instructor: Paul Kilburn, Ph.D., taught botany at Principia College, Illinois, as well as summer flora and ecology courses for the University of Colorado. He spent several summers doing tundra research at the Institute of Arctic and Alpine Research, University of Colorado at Nederland.

Fee: \$48 members/\$53 non-members

Limit: 15

Flora and Fauna of Colorado's Life Zones

Tuesdays, June 17, 24
from 5:30 to 9 p.m.

and

Saturday, June 28
from 9 a.m. to 3 p.m.
(three field trip sessions)

Come learn how prairie dogs, badgers and cottonwood trees adapt to a hot and dry prairie existence. Understand why pikas and ptarmigan live in high altitude sites. The general ecology, plants and animals and interrelationships of organisms will be discussed in each of Colorado's Front Range life zones.

Participants will travel to the plains, foothills, montane, subalpine and alpine zones and the class will consist of walks in the field. Burrowing owls will be an added attraction.

Please bring binoculars, sack lunch (or dinner), raincoat, sneakers, water, sunblock, camera and extra warm cold-weather clothes for the last field trip.

Meet: on June 17 promptly at 5:30 p.m. to carpool and receive directions. Or, for the first field trip only, you may prefer to meet at 6:15 p.m. at the east entrance to Cherry Creek Reservoir off Parker Road. Go through the entrance and park immediately on the right. A daily user pass fee of \$3 must be paid for each vehicle entering the park. Subsequent field trips will be held at Genesee Park and Guanella Pass.

Instructor: Tina Jones is a wildlife instructor who teaches at the University of Colorado and the Denver Museum of Natural History as well as DBG. She has many years of field experience.

Fee: \$25 members/\$27.50 non-members

Limit: 20

Wildflower Identification for Beginners I

Saturday, May 31
(one session)

10 a.m. to noon Herbarium

The study of wildflowers is a popular and rewarding hobby. "Which plant is that?" is often asked or wondered about. In this class, students will use simple guides to identify wildflowers. The mustard family (Cruciferae) and the pink family (Caryophyllaceae) will be stressed in this session and other families will be covered in subsequent classes. Bring a hand lens.

Instructor: Janet L. Wingate, M.S. and Ph.D. in botany from the University of Oklahoma, is currently on the DBG staff working in the Kathryn Kalmbach Herbarium. She is an avid field botanist who teaches regularly at Denver Botanic Gardens.

Fee: \$8.00 members/\$9 non-members

Limit: 15

Wildflower Identification for Beginners II

Saturday, June 28
(one session)

10 a.m. to noon Herbarium

This class may be taken independently or in conjunction with Wildflower Identification for Beginners I. The families stressed in this one-session workshop will be the mint family (Labiatae) and the parsley family (Umbelliferae). Bring a hand lens.

Instructor: Janet L. Wingate

Fee: \$8 members/\$9 non-members

Limit: 15

Plant Identification Using Botanical Keys

Saturday, May 31
(one session)

1 to 3 p.m. Herbarium

Would you like to improve your skills in basic plant identification? In this class you will practice using botanical keys to identify the native and naturalized flora. If your previous attempts to key plants have left you bewildered and frustrated, this class is for you.

Please bring William A. Weber's *Rocky Mountain Flora* (there will be a few copies on reserve in our library) and a hand lens to class.

Instructor: Janet L. Wingate

Fee: \$8 members/\$9 non-members

Limit: 15

Mushroom Identification

Wednesdays, May 28, June 4, 11
(three sessions)
7:30 to 9:30 p.m. Classroom C

This course will present a new and simplified approach to mushroom identification for beginners, while providing a firm base for those who may wish to pursue the subject in more depth in the future.

Three slide lecture sessions will cover structure, growth, habitat, and seasonality of mushrooms as well as information on toxicity and edibility. The use of field guides and keys will be demonstrated and recommendations will be given on those most useful in our area.

The main emphasis will be spring-fruiting mushrooms of the city and lower elevations. Collecting, cleaning, preparation and cooking hints will be provided.

Handouts will be given but students should be prepared to take additional notes. Participants will learn to positively identify more than 20 common edible, non-edible and poisonous species. An optional field trip will be scheduled according to local mushroom fruiting times.

Instructor: Marilyn Shaw lectures and teaches extensively and has been active in the Colorado Mycological Society for 13 years. She has studied with Alexander Smith, Harry Thiers and Orson Miller, Jr. as well as many other prominent mycologists. Marilyn is a consultant in mushroom identification for Denver Botanic Gardens and Rocky Mountain Poison Center.

Fee: \$24 members/\$26 non-members

Gardening for Results

Saturdays from 10 a.m. to noon at
DBG's Morrison Horticultural
Demonstration Center at 2320 East
11th Avenue; entrance is on 11th
Avenue.

Please indicate your program titles
if you are not attending the entire
series.

Professional horticulturists will present the background and techniques needed to achieve beautiful and bountiful gardens in this series of programs. Attend both or choose the one that suits your specific needs.

Saturday, May 3
The Culinary Herbs

This class is an introduction to the culture and uses of the cooking herbs. Plan an herb garden or use them to accent your annual beds or perennial borders as well as enhance your summer meals.

Saturday, May 24
All About Tomatoes

Everything you need to grow our favorite garden vegetable will be presented. Topics include determinate and indeterminate varieties, planting, pruning, fertilizing and problems such as aphids, whiteflies, sunscald and blossom end rot.

Instructors: Pat Pachuta and Lynn Thompson are horticulturists on the staff of Denver Botanic Gardens.

Fee: \$8 per program.

Ground Covers and Vines for Your Garden

Wednesday, May 7 (DBG House)
7:15 to 9:15 p.m.

and
Saturday, May 10 (field trip)
from 9 a.m. to noon
(two sessions: one lecture, one field trip)

This class will focus on over 30 evergreen and deciduous ground covers and vines for Denver area gardens. The ornamental and distinguishing characteristics of each species will be illustrated through the use of color slides. A discussion of their natural history, hardiness and culture will also be included and a field trip will provide a first-hand look at some of the individual plants.

Instructor: An experienced teacher, Jeffrey Frank studied landscape architecture at Pennsylvania State University and the University of Virginia and is presently employed as a landscape architect at Donald H. Godi & Associates, Inc., in Denver.

Fee: \$13 members/\$14.25 non-members

Intensive Vegetable Gardening Workshop

Section II: **Saturday, May 17**
(Rain date—Sunday,
May 18)

(one session) 10 a.m. to 2:30 p.m.
DBG's Morrison Center; 2320 East
11th Avenue, Denver

Please indicate your section on the
registration form.

This is a hands-on approach to intensive techniques for growing vegetables. Students will learn garden design, planning and appropriate varieties and will then work outside and go through the actual process of soil preparation and planting using special methods such as wide-row spacing.

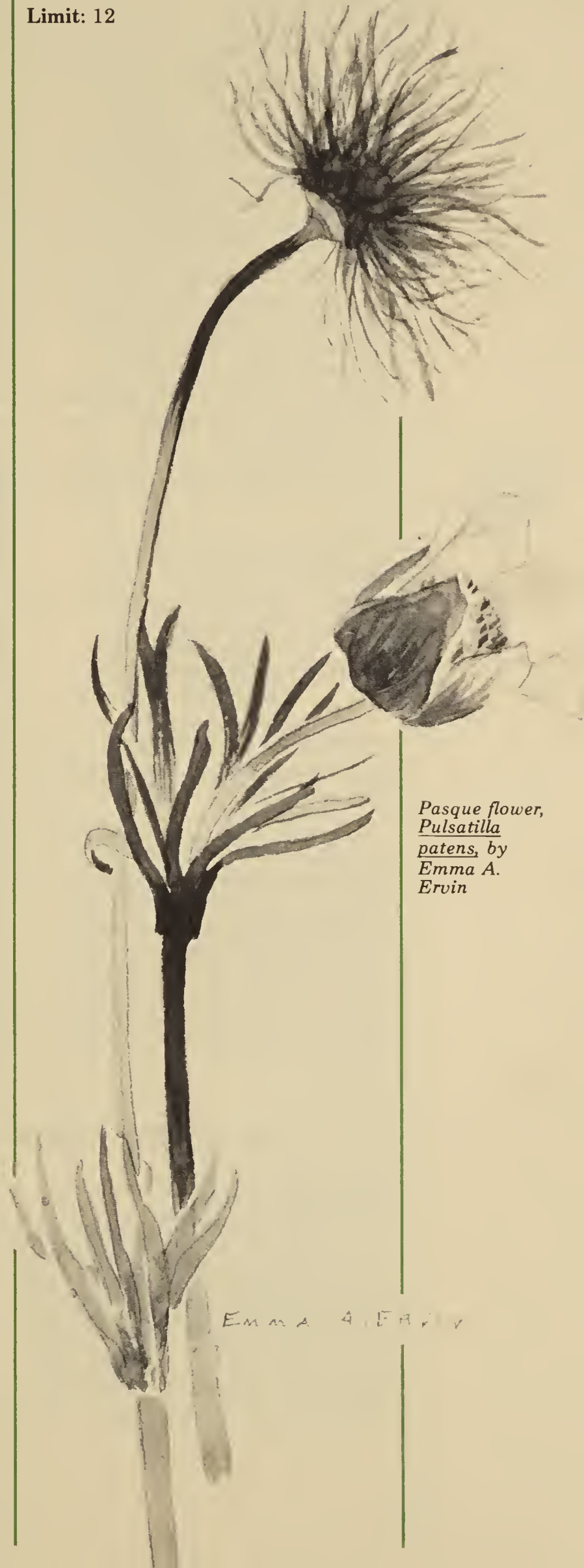
Dress appropriately in work clothes and practical shoes and don't forget to bring a lunch.

Instructor: Lynn Thompson is a horticulturalist who coordinates DBG's Community Garden Program. She has taught many classes on topics pertaining to home vegetable gardening in Colorado.

Fee: \$16 members/\$17.50 non-members

Limit: 12

7



*Pasque flower,
Pulsatilla
patens, by
Emma A.
Ervin*

Emma A. Ervin

Japanese Tea Ceremony

Section III: Sunday, May 11
 Section IV: Sunday, May 18
 Section V: Sunday, June 8
 Section VI: Saturday, June 14
 Section VII: Sunday, June 22
 (one session) 2 to 3 p.m.
 Tea House in DBG's Japanese Garden

Please indicate your section on the registration form.

Because of its emphasis on such concepts as harmony, respect, purity, tranquility and elegant simplicity, the tea ceremony has for centuries been considered the epitome of Japanese life. This is an opportunity to experience an authentic tea ceremony in the quiet splendor of our Japanese Garden.

Instructor: Kathryn Kawakami has done much to inform Denver area residents and students about the culture of Japan. She will be assisted by William Crowder who studied the Tea Ceremony in Japan at Ura Senke.

Fee: \$4.50 members/\$5 non-members

Limit: 15

Watercolor and Mixed Media Painting

Section I: Wednesdays, May 14, 21, 28, June 4, 11, 18
 9:30 to 11:30 a.m.
 Section II: Saturdays, May 17, 24, 31, June 7, 14, 21
 1 to 3 p.m.
 (six sessions) Classroom B

Please indicate your section on the registration form.

Translate your vision of nature into exciting color! Wet-in-wet techniques as well as painting on dry paper will be demonstrated. From quick gestures to slow contemplative studies, students will explore the rich world of nature at Denver Botanic Gardens. Instruction and demonstrations in assorted media, including pastels, will be provided.

Instructor: Oksana Ross, Ph.D., studied at New York University and Columbia University and has 32 years of teaching experience.

Fee: \$48 members/\$53 non-members

Limit: 20

Basketry Workshop: Picnic Basket

Sundays, July 13,
 from 9 a.m. to 5 p.m.
 July 20,
 from 9 a.m. to 2 p.m.

(two sessions)

Morrison Horticultural Demonstration Center; 2320 East 11th Avenue, Denver

This beautiful basket is a hybrid between the voluptuously shaped rib basket and the traditionally shaped rectangular picnic basket. Certain to become an heirloom, this large, strong basket is latched together using three-point lashing and has a separate hinged lid on each half.

Previous basketry experience is required and students should bring a sharp knife, awl, old towel, sandpaper, pinch-type clothespins, pruning shears and a sack lunch to class.

This basic basket will be made during the first session and the handle and lids will be applied during the second. Students may need to complete their basket at home.

Instructor: Robin Taylor Daugherty is a fiber artist with considerable teaching experience; she has taught weaving, spinning, felting, tapestry-making and basketry throughout Colorado and her work is exhibited widely.

Fee: \$49 members/\$54 non-members (includes a \$12 materials fee)

Limit: 10

*Picnic basket
 by Robin
 Taylor
 Daugherty*



Denver Botanic Gardens
 909 York Street
 Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

Registration Form for Classes and Field Trips

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Address _____

City _____ State _____ Zip _____

Home Tel. No. _____ Business Tel. No. _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No



1986 Garden Concert Series

A wonderful summer of music and dance in the amphitheater of Denver Botanic Gardens is soon to begin. Six great ensembles and ten performances, a full symphony orchestra, a jazz legend, dance and, as always, a surprise or two await you this summer.

Denver Botanic Gardens, KCFR 90.1 FM and United Bank of Denver are pleased to present this summer's Garden Concert series at DBG. Please note that this announcement should serve as your complete schedule for the summer. Place it in a safe and visible location.

The Gardens' Brass Ensemble

Thursday, June 26 at 7:30 p.m. (rain date—Sunday, June 29 at 10 a.m.) Gate opens 6 p.m. *Tickets on sale starting Monday, June 9.*

This is a 19-piece brass and percussion ensemble featuring some of the finest instrumentalists in Colorado who have come together just for this one-time only Garden Concert performance.

The Blair String Quartet: Music from the Aspen Music Festival

Thursday, July 10 at 7:30 p.m. (rain date—Sunday, July 13 at 10 a.m.) Gate opens 6 p.m. *Tickets on sale starting Monday, June 30.*

The Blair String Quartet comes to us this summer as designated "Quartet in Residence" for Colorado. Praised by the *Washington Post* for their "exquisite balance, perfect intonation and exemplary musicianship," the Blair Quartet is expected to be one of the highlights at this summer's Aspen Music Festival.

The Colorado Philharmonic: The National Repertory Orchestra

Thursday, July 24 or Friday, July 25 at 7:30 p.m. (rain date—Sunday, July 27 at 10 a.m.) Gate opens at 6 p.m. *Tickets on sale starting Monday, July 14.*

By popular demand, this group is back for two evenings at the Gardens. Expect music by Beethoven, Janacek, Rachmaninoff and Gershwin conducted by Carl Topilow. Anticipate enjoying a full symphony orchestra and a magnificent sound.

The Boulder Bassoon Band

Thursday, August 7 or Friday, August 8 at 7:30 p.m. (rain date—Sunday, August 10 at 10 a.m.) Gate opens at 6 p.m. *Tickets on sale starting Monday, July 28.*

A favorite last summer, they're back for two nights during 1986. This is a group of fantastic musicians with a witty, tongue-in-cheek approach to their performance. Hear six bassoonists led by RCA Records recording artist Bill Douglas with all new material for this summer. This is going to be fun!

Dizzy Gillespie and the Garden All-Stars

Thursday, August 21 or Friday, August 22 at 7 p.m. (rain date—Sunday, August 24 at 10 a.m.) Gate opens at 5:30 p.m. *Tickets on sale starting Monday, August 11.*

The incomparable jazz trumpet master, Dizzy Gillespie, performs for two nights at DBG! Mr. Gillespie will join a 15-piece jazz orchestra put together just for this auspicious occasion. "The Garden All-Stars" are exactly that—the very best jazz musicians in the area. Many you've seen and heard in clubs and concert halls throughout the area. "A Night in Tunisia," "Woody 'n You," "Manteca" and a host of great Dizzy Gillespie compositions will ring through the Gardens' amphitheater. Note: Should it be necessary to make use of the rain date due to inclement weather, "The Garden All-Stars" will perform without Mr. Gillespie.

The Cleo Parker Robinson Dance Ensemble

Thursday, September 4 or Friday, September 5 at 7 p.m. (rain date—Sunday, September 7 at 10 a.m.) Gate opens at 5:30 p.m. *Tickets on sale starting Monday, August 25.*

Cleo Parker Robinson's Dance Ensemble was clearly a popular performance in last year's series. They hold the distinction of being

Colorado's first full-time, salaried, professional modern repertory dance company and have toured to great acclaim since their founding in 1971. They are guaranteed to provide two exciting evenings of dance and music.

Tickets will be sold beginning on Mondays this year rather than on Fridays as in previous years. Locations to purchase tickets are the following:

- Denver Botanic Gardens' House, 909 York Street from 7 a.m. until 5 p.m., Mondays (first day of sales) and 8 a.m. until 5 p.m. weekdays until concert is sold out.
- KCFR Studios, 2249 South Josephine Street from 7 a.m. until 5 p.m. Mondays (first day of sales) and 8 a.m. until 5 p.m. weekdays until concert is sold out.
- The United Bank of Denver, One United Bank Center at 1700 Lincoln (lobby) from 7 a.m. to 5 p.m. Monday (first day of sales only).
- Listen Up Audio/Video in Boulder only, 2034 Arapahoe, from 10 a.m. to 8 p.m. weekdays (including first day of sales), 10 a.m. to 6 p.m. Saturdays and noon until 5 p.m. Sundays.

Non-refundable tickets for each performance are \$3 for members of Denver Botanic Gardens or KCFR (proof of current membership will be required at time of purchase) and non-member tickets are \$5 each. Children *under* the age of two will be admitted free. All others require a ticket. All tickets will be sold on a first come, first served basis with a limit of four tickets per person.

All programs (except Cleo Parker Robinson Ensemble) will be broadcast live by KCFR at 90.1 FM. If a concert is threatened by bad weather, listen to KCFR (beginning at 3:55 p.m.) for an announcement of the status of the Thursday or Friday evening concerts.

Keep in mind that new members of Denver Botanic Gardens in the Advocate category (\$300) are entitled to a complimentary pair of Season Concert tickets. Members who choose to upgrade their present category of membership to the Advocate level will also receive a pair of Season Concert tickets.

continued from page 1

Rock Alpines—Look for a wide selection of hardy fancy ferns, such as the ruffly 'Cristata' and Japanese painted ferns in silvers and burgundies. Choice alpines that have been propagated at the Gardens will be available, including a selection of such penstemons as *Penstemon fruticosus* 'Holly,' colorful phloxes, blue poppy meconopsis, dryland shrub atriplex and a rare "bun" yucca 3-4 feet tall. Gardeners will be able to create their own wildflower corner with the wildflower meadow mix. A good assortment of familiar ground covers and alpine plants, which are the backbone of any garden, will round out the selections. Nancy Hill will demonstrate how to plant in troughs.

Waterlilies—On display will be the world's smallest flowering plant, wolffia; it will be in a clear container under a magnifying glass. Anyone making a waterlily purchase will be given a start of it. Look for flower and frog costumes to find the waterlily area.

Vegetable Booth—The traditional varieties of vegetables featured in past years which are suited to Colorado will be for sale. In addition, there will be limited quantities of some rather more exotic items, such as miniature 'Tom Thumb' lettuce (it's served whole with dressing as an individual salad), collards, 'Easter Egg' eggplant (it's bright red), endive, fennel, 'Melody' and New Zealand spinach, popping corn, golden peppers, cherry and sweet banana peppers and globe artichokes. Lynn Thompson, community garden coordinator, will be on hand between 10 and 2 on Friday and Saturday to answer any questions. Go ahead—ask her anything!

Herb Booth—Head for the Gazebo in the herb garden to pick up Tea Baskets, trays of three popular herbs for indoor gardening, and 10-inch hanging baskets filled with five different herbs. New to the herb stock will be *Aloe vera*, cumin, Joseph's coat, scarlet pimpernel, safflower, sesame, six-packs of basil and arugula (the latest "in" salad green). Goto kola, an herb that supposedly helps regenerate brain cells, will again be carried. That should be a sell-out.

Rojean Konkel tries on a hat while DBG volunteer Alice Kafka assists at the 1985 Annual Plant and Used Book Sale



Books—This year there is an especially good collection of horticulture, Americana, mystery and biography books. The hardcover novels have been alphabetized for easier selection. The day after the plant sale, on Sunday, May 11, the Bag Sale will be from 1 to 4 p.m. Here, for \$3, customers can purchase all the books they can fit into a standard grocery bag; magazines will also be on sale at bargain prices.

That's not all. Raffle tickets are available for \$2 each—with a chance to win everything from a weekend for two at Aspen's Hotel Jerome to a llama trek for two.

Carolyn Crawford, winner of this year's poster contest, will be on hand to autograph copies of the Annual Plant and Used Book Sale poster from 11 a.m. to 3 p.m. both days. The elegant poster, definitely suitable for framing and display, is selling for \$30.

The parking situation is improved this year. Added parking in Congress Park has been approved for about 100 spaces—between 9th and 10th on Josephine. Plant pick-up lanes are designated on 11th from Gaylord to York and on York from 11th to 9th Avenues.

Anyone making plant purchases of over \$500 or more is entitled to free delivery in metro-Denver.

An interesting note: For the past 20 years, Boy Scout Troop #5 (from the general area of the University of Denver) has provided customer service by helping load purchases in cars, watching purchases while customers leave to retrieve their cars and keeping track of the grocery carts. Say hello to them this year and to Troop Master Tom Noakes.

Gardening Tips for May

In Colorado, the word "iris" instantly calls up an image of the giant-flowered tall-bearded iris that rival, and indeed, surpass orchids in size of blossom, sumptuous textures and colors. Tall-bearded irises are so easily grown and propagated that they have simply stolen the show from the rest of the genus. It takes a sophisticated gardener, however, to know about the other irises.

And what a wealth of plants the genus *Iris* contains! An enterprising home gardener can have them blooming from January in most years (when *Iris danfordiae*, the tiny Turkish alpine, is often the first plant to bloom in many gardens), all the way to August, when the vesper iris opens. This peculiar plant from northern China has been found growing on top of the Great Wall. It usually opens its flowers only an hour or two before dusk, and closes them early in the evening. This, and the other distinctive features it possesses, have made some scientists put this in another genus altogether, *Pardanthopsis*.

The iris season can extend even beyond this if you locate some strains of remount irises. These are intermediate or tall-bearded irises that are genetically programmed to bloom again late in the season. This feature is perhaps more pronounced in California and other warm winter climates, but a few strains are reliably reblooming, even in Colorado.

Of course, what is especially delightful about species irises is not just that you can extend the iris season from a few weeks to fill the calendar with bloom, but by carefully studying and seeking out the right plants, you can find one or another species of iris to grow in practically any micro-climate you might have in your garden. Unlike tall-bearded iris, most species resent disturbance. Many have pleasing grassy foliage that can form dense ground cover, forming a pleasing fountainlike accent in the garden design.

Next to tall-bearded iris, Siberian iris are probably best known in this region. These are mostly hybrids of *Iris sanguinea* (which is truly Siberian and east Asian in distribution) and *Iris sibirica*, which, in fact, is largely from eastern Europe. In cool but sunny sites, on slightly acid soils, Siberian iris forms dense tussocks of deep green grassy foliage that is crowned for much of June with a vivid blue to purple, or even white, butterflylike flower.

Visitors to Denver Botanic Gardens are often surprised to find huge iris blooming through most of July: These are the spuria iris, so-named for *Iris spuria*, the species which predominates in the pedigrees of most hybrids of this group. Spurias form clumps like oversized Siberians—and are just as difficult and resentful of disturbance. They tolerate alkaline soils and much hotter positions, however. Their flowers come in a wide spectrum of shades from white and yellow to fine blues and even violet.

Many people think Japanese irises are difficult to grow in Colorado, although a visit to our Japanese garden in late June will quickly dispel this fallacy. Provided they are given a moist soil, rich in acid humus, these irises will grow and bloom beautifully in Colorado. They do not require standing water and will rot if inundated for too long at the wrong time of the year.

These are some of the largest groups of garden irises that have attracted thousands of home gardeners to specialize in this genus alone. And yet, there are several hundred more species of irises, many of which possess unique features of bloom and habit, that haven't even been mentioned. Many local gardeners are starting to discover the delight of reticulate irises that can be had so cheaply as bulbs from any nursery in the fall.

These thrive in ordinary garden conditions in Colorado, although they perhaps look most fitting in rock gardens.

There are literally thousands of selections of hybrids among the many tiny species of bearded iris, primarily derived from *Iris pumila* from eastern Europe and *Iris chamaeiris* from southern Europe. These quickly form thick tufts of glaucous foliage, with bright blue, purple, rose, white or yellow flowers in March and April. These have been hybridized extensively with taller bearded iris to produce an infinite range of intermediates.

The word "iris" is derived from the ancient Greek word for the goddess of the rainbow, and like the rainbow, this genus is both colorful and endlessly fascinating.

Panayoti Kelaidis
Curator of the Rock Alpine Garden
at Denver Botanic Gardens



Iris douglasiana
by Panayoti
Kelaidis

C MAY

Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

African Violet Society, 4th Thurs. of 7 months; Bonsai Society, 1st & 3rd Tues.; Cactus & Succulent Society, 2nd Tues.; Civic Garden Club, 1st Fri.; Colorado Native Plant Society, 4th Wed.; Gloxinia Gesneriad Growers, 1st Sat.; Hemerocallis Society, 3rd Sun. of 4 months; Ikebana International, 4th Fri.; Iris Society, spring & fall dates; Men's Garden Club, 4th Thurs.; Mycological Society, 2nd Mon.; Orchid Society, 1st Tues.; Rock Garden Society, 3rd Wed.; Rose Society, 2nd Thurs.; Ultra Violet Club, 4th Mon.; Water Garden Society, 2nd Sun. of 5 months

A	L	E	N	D	A	R
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
		Basketry Workshop: Market Basket	Ground Covers and Vines for Your Garden		Annual Plant and Used Book Sale	Basketry Workshop: Market Basket
11	12	13	14	15	16	17
Japanese Tea Ceremony			Watercolor and Mixed Media Painting	Spring Flora		Free Day, Intensive Gardening, Watercolors
18	19	20	21	22	23	24
Japanese Tea Ceremony			Plant Life Field Trip: Highlands Ranch			All About Tomatoes
25	26	27	28	29	30	31
			Mushroom Identification			American Iris Society Show and Sale Wildflower ID for Beginners I, Plant ID Using Botanical Keys

Coming Next Month

June 1
Bird Courtship

June 7
Tree Walk at Washington Park

June 8
Japanese Tea Ceremony

June 14
Japanese Tea Ceremony

June 14-15
Rocky Mountain Bonsai Society Show

June 17
Free Day, Young Audiences Concert, Flora and Fauna of Colorado's Life Zones

June 21
Weed Identification

June 22
"The Magic of Herbs," Japanese Tea Ceremony

June 26
The Gardens' Brass Ensemble

June 28
Wildflower Identification for Beginners II

June 28-
July 6
International Rock Garden Conference

June 28
Scarecrow Contest

Denver Botanic Gardens, Inc.
909 York Street
Denver, Colorado 80206
303-575-3751

May 1986

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Rocky Mountain Bonsai Show June 14 and 15

More than 150 bonsai trees will be elegantly displayed at Denver Botanic Gardens on Saturday and Sunday, June 14 and 15 between 9 a.m. and 4:30 p.m. when the Rocky Mountain Bonsai Society holds its annual bonsai exhibit on Father's Day weekend. Many varieties will be shown, including some up to 500 years old.

Local enthusiasts are fortunate to have some of the foremost masters and teachers living in the Denver area. Some of them will demonstrate basic techniques of bonsai culture at 11 a.m., 1 p.m. and 3 p.m. each day of the show.

Bonsai (pronounced "bone-sigh"), the art of growing trees in miniaturized form, is familiar to thousands of gardening enthusiasts

outside Japan. Those who have tried their hands at it have discovered what a rewarding experience bonsai can be. The literal meaning of bonsai is "planted in a tray." A tree may be only a foot tall but still possess the exact features of a towering specimen found high in the mountains or a windswept pine clinging to a cliff above an isolated seashore.

In addition to the non-member gate admission fee, there will be a \$.50 charge for visitors 16 and over. Children under 16 will be admitted free.

The splendor of the evergreen and deciduous bonsai on display at this show will certainly attract new enthusiasts.

Inside:

Young Audiences Concerts page 3

Summer Kick-Off page 3

"The Magic of Herbs" page 4

Classes for adults page 5

Classes for kids page 8

Extended Evening Hours

Extended evening hours will again be in effect at Denver Botanic Gardens this summer. Starting Saturday, June 28, evening hours will extend from the usual closing time of 4:45 to dusk. The Gardens (including the Conservatory) will be open every Wednesday, Saturday and Sunday evening through Sunday, August 31.

The only exception to this is during the Asian Pacific Festival, Saturday and Sunday, August 2 and 3. Entry is by ticket sales only for the special planned events.

The cooler evenings are perfect to enjoy the serenity of the Gardens; bring a picnic dinner and take advantage of the outdoor tables and benches.



When read top to bottom and right to left: Bonsai Exhibit at Botanic Gardens. Calligraphy by George Fukuma

Bob Kataoka's *Pinus ponderosa* bonsai. Trained in the half-cascade style for 28 years, it is approximately 500 years old.

Terrace and Garden Tour in Golden July 26

Become acquainted with some distinctive gardens in Golden this year. On Saturday, July 26 from 9 a.m. until 5 p.m., the Denver Botanic Gardens' Guild will offer an opportunity to tour some imaginative and breathtaking gardens in Golden on their annual Terrace and Garden Tour.

Featured will be lush lawns, xeriscaped hillside gardens and tranquil cottage gardens. One creative homeowner combined large rocks, small patios and a courtyard with a variety of levels. Colorful plantings highlight each garden while several utilize unusual plantings or focal points. Some locations in Golden provide views that offer intriguing garden back-

grounds and a number of this year's tour gardens have taken advantage of this natural design element to add an extra dimension.

The tickets, which include complimentary refreshments at one of the gardens, are \$8 for adults and \$4 for children 5 through 12 years old. These tickets are tax-deductible donations to Denver Botanic Gardens and will be on sale in the Gardens' Gift Shop after July 4 as well as from members of the Guild. They can also be purchased at some of the gardens on the day of the tour.

Watch the July *Green Thumb News* for a complete listing of tour gardens and additional details.



"Scarecrows are for Birds" Contest

Mark June 28 as a day to bring the entire family to the DBG Community Gardens. That's the day of the "Scarecrows are for Birds" contest judging, scheduled from 10 a.m. to 1 p.m.

KUSA's (Channel 9) gardener and weathercaster Bill Kuster will be the contest's master of ceremonies, with KHOW's Boogie Man also set to appear. The community gardeners can enter their creations in one of four categories: Funniest, Scariest, Media Personalities and Children's.

The Grand Prize winner receives season tickets to the Summer Garden Concert series and a special award from Bill Kuster himself. First, second and third places in each category win prizes as well.

One of last year's winners, "Cindi Lauper," made the front pages of both newspapers and may soon be a poster. We expect a lot of colorful entries, so plan to come by June 28 for the excitement.

Tributes

In memory of Mrs. Fred Anschutz
Mr. & Mrs. John C. Mitchell II

In memory of Lee Ashley
Mr. & Mrs. Sidney Baldrige
Don & Peggy Beales
The Denver at Cherry Creek
David & Helen Garlin
Jeanette Hall & Family
Mr. & Mrs. Glenn Kerrigan
Long & Jaudon
Ed & Auralie Marx
Northern Colorado Gladiolus Society
Elizabeth DeBacker Parsons
Wilma Robarson
Gwendolyn Skinner
Mr. & Mrs. Paul Thurston

In memory of Charles R. Bopp
Dr. & Mrs. Jack Stoffel

In memory of Janet Brett
Solange Gignac

In memory of Mary Frost
Gertrude Hausmann, M.D.

In memory of Arch Graves
Elizabeth Heacock

In memory of Edward "Ned" Marshall
PHC Industrial Supply Co.

In memory of Ethel Raleigh
Allyne E. Lawless

In memory of Jane Wigginton
Nancy Denison

Great Getaways— Future Trips

With summer here, your thoughts have turned to vacations and you may want to plan further than just this summer. Here is Denver Botanic Gardens' list of projected tours:

Early March 1987: As previously discussed in the May *Green Thumb News*, DBG is going to the Orchid Isles and Asian Gardens in conjunction with the 12th World Orchid Conference to be held in Tokyo on March 16, 1987. Reservations are being accepted.

June/July 1987: A three-week adventure in the Pyrenees of northern Spain and southern France is being planned to observe the region's incredible flora and artistic beauty.

March 1988: A return trip to the Galapagos Islands will be offered for those who could not go this year. Sorry, no Halley's Comet.

Summer 1988: Lapland, from Norway to Iceland and Greenland, is where Getaways takes us this summer.

Fall 1988: This is a first for the Gardens. We will conclude our Getaways program for 1988 in China.

We are always looking forward to having you travel with us and if you have suggestions for future tours, please let us know. Call Assistant Director Andrew Pierce at 575-3751 for details.

Green Thumb News Number 86—6 June 1986

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than May 20 for July, June 20 for August and July 18 for September.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.





*Fun at a 1985
Young
Audiences
Concert*

Young Audiences Concert Schedule

Three fun-filled concerts are scheduled for the summer of 1986 thanks to Young Audiences and their sponsor, PACE Membership Warehouse. The gate opens at 5:30 p.m. with the concerts beginning at 6:30 p.m. All rain dates are scheduled for the following Sundays at 10 a.m.

Tuesday, June 17—"Peter and the Wolf" will be performed by the DaCapo Wind Quartet and Kay Casperson, mime. The ensemble brings to life the delightful story of Peter, the cat, the bird and the duck as they try to elude and later capture the wolf. The children are led into the story with hats, masks and other props. Last year's production with Kay Casperson was outstanding!

Tuesday, July 1—"Hop into Opera" introduces children to the FUN of opera. Duain Wolfe provides undisputed, unforgettable opera experiences for children of all ages. Duain and the Central City Singers will bring to life favorite excerpts from "Naughty Marietta," "Barber of Seville" and "La Boheme."

Tuesday, July 15—"Carnival of the Animals and Company" features the Denver Brass conducted by Tom Jensen who will be joined by a special guest narrator. Highlights of this animated brass musical performance include audience participation and a lesson in conducting.

Tickets for these interactive concerts are \$3 per person or \$2 for members of Denver Botanic Gardens or Young Audiences. Ticket information can be obtained by calling 825-3465.

June Garden Concert Series Schedule

The 1986 Garden Concert Series presented by Denver Botanic Gardens, KCFR 90.1 FM and United Bank of Denver begins on June 26 and ends in September. Tickets go on sale this month for the following concerts:

The Gardens' Brass Ensemble

Thursday, June 26 at 7:30 p.m.
(rain date—Sunday, June 29 at 10 a.m.) Gate opens 6 p.m. *Tickets on sale starting Monday, June 9.*

This is a 19-piece brass and percussion ensemble featuring some of the finest instrumentalists in Colorado who have come together just for this one-time only Garden Concert performance.

The Blair String Quartet: Music from the Aspen Music Festival

Thursday, July 10 at 7:30 p.m.
(rain date—Sunday, July 13 at 10 a.m.) Gate opens 6 p.m. *Tickets on sale starting Monday, June 30.*

The Blair String Quartet comes to us this summer as designated "Quartet in Residence" for Colorado. Praised by the *Washington Post* for their "exquisite balance, perfect intonation and exemplary musicianship," the Blair Quartet is expected to be one of the highlights at this summer's Aspen Music Festival.

Look forward to a fun-filled concert season in DBG's amphitheater. For complete details on fees and where to obtain tickets, please refer to the *May Green Thumb News* or call 575-2547 for a recorded message.

Summer Kick-Off

The summer equinox officially proclaims summer at 7:30 a.m. on June 21. Denver Botanic Gardens welcomes summer starting at 5 p.m. on June 21.

To kick-off the busy summer season, Spanish paella—that wonderful dish pungent with saffron and thyme—will be cooked outdoors by chefs from Gringo's Restaurant and served to the first 800 people to buy tickets. For all the paella you can eat, beverages and Spanish music, the charge is only \$10 per adult and \$7 for children up through age 14. The Gardens will be open until dusk on this longest day of the year.



Gringo's is located on University Boulevard south of Iliff and on Parker Road at Yale.

In case of rain, John C. Mitchell II Hall and a tent will provide shelter but the paella will go on!

Contact our Development Office at 575-3751, ext. 14 or 355-3456 or Gringo's at 777-2935 or 695-6815 for tickets.

"The Magic of Herbs"—June 22

Denver Botanic Gardens' members can herald the arrival of summer by attending a special program on culinary herbs. This program on Sunday, June 22 at 2 p.m. titled, "The Magic of Herbs," will be presented in John C. Mitchell II Hall by Gloria A. Falkenberg.

Mrs. Falkenberg is an avid herb gardener who was a charter member of the DBG Guild when it began in 1960. The Guild originally formed to care for our Herb Garden, which has since achieved a national reputation. A member for many years in the Herb Society of America, she has also served on its Board as well as Chairman of its Members-at-Large. Mrs. Falkenberg has spoken extensively on herbs and enjoys sharing her enthusiasm for this special group of plants with others.

Beginning with a bit of early history, she will present basic cultural and herb garden design

information along with hints on how to use them successfully in the kitchen. Learn how to harvest them and turn them into savory vinegars and jellies.

Following her talk, herbal refreshments will be served (and their recipes provided, of course) and members are encouraged to stroll through our Herb Garden where knowledgeable volunteers will be available to answer questions.

Members will be charged \$5 for this special afternoon and non-member guests are welcome to attend although they will be charged \$7.50.

Reservations are necessary and must be received by June 12. Please use the Education Department form on page 8 and be sure to include the names of any guests who may be accompanying you.

Interest in the culinary herbs is at an all-time high and this program is certain to be a popular one.

Botanical Art in John C. Mitchell II Hall

A special exhibit of paintings, "Western American Wildflowers," by Lillian Hallock, will be shown in John C. Mitchell II Hall in conjunction with the Second Interim International Rock Garden Plant Conference on Saturday, June 28 through Monday, June 30 from 9 a.m. to 4:45 p.m.

Lillian Hallock, née Spencer, was born in Pullman, Washington, in 1889. After graduating from high school she continued her studies in the Library School of Columbia University, going on to work as a librarian at the New York Public Library. She married and returned to Oregon to live and paint until her husband's death.

She produced over 300 detailed paintings of western American wildflowers, particularly those from her home state of Oregon. Mrs. Hallock's paintings are especially noteworthy because she included detailed depictions of the flowers' root systems, as well as their flowers and stems.

A collection of 117 of these paintings has been donated to Denver Botanic Gardens by Mrs. Hallock's daughter, Mary Hallock

Sargent and her children, Matthew Wells, Annie Hamilton, Miriam Holley and Elizabeth Wells. The artist's granddaughters, Annie Hamilton and Miriam Holley, are generously donating their time and effort to restore and rematt the collection which has been in storage in our Helen Fowler Library for over 15 years.

Horticultural Therapy Training Program July 21-22

Horticultural therapists, adjunctive therapists, allied health therapists and all special education professionals geared to practicing horticultural therapy will be interested in attending an advanced training program on July 21 and 22 at Denver Botanic Gardens' Morrison Horticultural Demonstration Center.

"Fundamentals of Assessments: Techniques for Horticultural Therapists" will address current techniques of client assessment and their application to treatment programs developed by horticultural therapists. Lectures, group discussions and experimental learning will be the framework for this two-day training session.

For details on training objectives, registration and continuing education credit, call Judy Carrier, H.T.R., at 575-3751 or watch the *July Green Thumb News*.

Colorado Water Garden Society Plant Auction

The Colorado Water Garden Society will hold its annual auction and sale of water plants on Sunday, June 8 at DBG's Botanic House at 909 York Street. This event will be open to the public.

Plants which have been grown by members of the Society for this sale can be viewed in the courtyard beginning at 1:45 p.m. Bidding on the tropical lilies and other plants that have been brought in for the auction will begin around 2 p.m. A demonstration of techniques for potting the various types of water plants will be offered following the auction.



Desert Parsley,
Lomatium
macrocarpum,
by Lillian
Hallock

Flora and Fauna of Colorado's Life Zones

Tuesdays, June 17, 24
from 5:30 to 9 p.m.

and

Saturday, June 28
from 9 a.m. to 3 p.m.
(three field trip sessions)

Come learn how prairie dogs, badgers and cottonwood trees adapt to a hot and dry prairie existence. Understand why pikas and ptarmigan live in high altitude sites. The general ecology, plants and animals and interrelationships of organisms will be discussed in each of Colorado's Front Range life zones.

Participants will travel to the plains, foothills, montane, subalpine and alpine zones and the class will consist of walks in the field. Burrowing owls will be an added attraction.

Please bring binoculars, sack lunch (or dinner), raincoat, sneakers, water, sunblock, camera and extra warm cold-weather clothes for the last field trip.

Meet: on June 17 promptly at 5:30 p.m. to carpool and receive directions. Or, for the first field trip only, you may prefer to meet at 6:15 p.m. at the east entrance to Cherry Creek Reservoir off Parker Road. Go through the entrance and park immediately on the right. A daily user pass fee of \$3 must be paid for each vehicle entering the park. Subsequent field trips will be held at Genesee Park and Guanella Pass.

Instructor: Tina Jones is a wildlife instructor who teaches at the University of Colorado and the Denver Museum of Natural History as well as DBG. She has many years of field experience.

Fee: \$25 members/\$27.50 non-members

Limit: 20

Plant Life Field Trip: Mount Falcon Park, Jefferson County

Wednesday, June 18
9 a.m. to 4 p.m.

Mount Falcon Park is located just outside Morrison, Colorado, on Indian Hills Road (Parmalee Gulch Road). Numerous trails lead to scenic vistas and the early summer wildflowers here are especially plentiful.

Larkspurs, blue mist penstemons and orange meadow arnicas are expected to be blooming in profusion. Bring a sack lunch.



Leader: Peter Root is an amateur botanist who volunteers regularly in the Kathryn Kalmbach Herbarium at DBG; he is also a volunteer naturalist at Roxborough State Park.

Meet: promptly at 9 a.m. in the DBG House parking lot to carpool and share gasoline expenses.

Fee: \$2 per person

Limit: 20

Weed Identification

Saturday, June 21
(one session)
10 a.m. to noon Herbarium

Learn to identify the weeds of your lawn and garden. Common weeds will be examined in the lab and a short local field trip will provide a first-hand look at some others. Bring an unknown weed for identification.

Instructor: Janet L. Wingate

Fee: \$8 members/\$9 non-members

Limit: 15

Alpine Ecology

Wednesday, July 9 (Classroom B)
from 7 to 9 p.m.

and

Sunday, July 27 (field trip)
from 8 a.m. to 5 p.m.

(two sessions: one lecture, one field trip)

Learn to identify major plant species in the various plant communities of the alpine environment above timberline in the Rockies. Emphasis will be on the ecology of these communities including soil features, climate and the biological adaptations and plant forms dominating these areas.

Instructor: Paul Kilburn, Ph.D.

Fee: \$16 members/\$17.50 non-members

Limit: 15



Alpines '86 field trip guides with Panayoti Kelaidis



Alpine Botany and Animal Adaptations

Thursday, July 17

9 a.m. to 3 p.m.

(one field trip session)

Come see some of our magnificent alpine wildflowers in bloom and learn how they are able to survive in the harsh, high altitude environment. Freezing summer temperatures can occur at night and the wind can be amazingly severe at 13,000 feet. Animal adaptations to this alpine existence will also be discussed.

Students will walk about a mile in all on fairly flat terrain in the Summit Lake, Mount Evans area.

Please bring: a warm jacket, hat, gloves, rain jacket, sweater, comfortable shoes (sneakers are adequate), sunblock, drinking water, lunch and a camera and binoculars if you have them.

Meet: promptly at 9 a.m. in the main DBG parking lot to carpool. Students wishing to meet at the Geology Roadcut off I-70 may call the Education Department at 575-3751, ext. 20 for specific information.

Instructor: Tina Jones is a wildlife instructor who teaches at the University of Colorado and the Denver Museum of Natural History as well as DBG. She has many years of field experience.

Fee: \$10 members/\$11 non-members

Limit: 20

Field Trip to Mount Goliath

Sunday, July 20

8 a.m. to 3 p.m.

Tundra wildflowers hold a special fascination for both amateur and professional botanists and Mount Goliath is an exceptional place to observe them. Carpets of dainty wildflowers are complemented by grand mountain vistas and the sculptured, grizzled beauty of the bristlecone pines.

Join two experienced field trip leaders and walk the M. Walter Pesman Trail, a winding 1.5 mile, downhill path at 12,100 feet.

Please bring your lunch and drinking water and dress appropriately.

Leaders: Panayoti Kelaidis is curator of the Rock Alpine Garden at DBG and is an enthusiastic and capable field botanist. Gwen Kelaidis studied botany at the University of Wisconsin and was formerly curator of the Herbarium there. An avid rock gardener, she also has a great deal of field trip leadership experience.

Meet: at 8 a.m. in the DBG parking lot. Bus transportation will be provided. Please be prompt.

Fee: \$15 members/\$16.50 non-members (includes Janet L. Wingate's brochure, *Alpine Wildflowers of Mount Goliath*, as well as bus transportation).

Limit: 45

Wildflower Identification for Beginners II

Saturday, June 28

(one session)

10 a.m. to noon Herbarium

This class may be taken independently or in conjunction with Wildflower Identification for Beginners I. The families stressed in this one-session workshop will be the mint family (Labiatae) and the parsley family (Umbelliferae). Bring a hand lens.

Instructor: Janet L. Wingate

Fee: \$8 members/\$9 non-members

Limit: 15

Edible Plants Workshop

Saturday, July 12

9 a.m. to 5 p.m. Classroom B

Help cook and then sample some local Colorado wild edibles. Have you tried sumac lemonade or fried yucca flowers? How about cattail roots and wild onions?

In the first part of this workshop, participants will discuss, prepare and eat some of the common edible wild plants found near Denver. In the second part, students will go out on a field trip in the foothills to learn their identification. Some information on North American Indian uses will also be provided.

Please bring a sweater and rain gear, sunblock, camera (if you have one), notebook and your lunch and drinking water since students will sample small amounts of the wild foods.

Instructor: Tina Jones

Fee: \$12 members/\$13 non-members

Limit: 15

Basketry Workshop: Pine Needle Basket

Section I: Saturday, July 12
Section II: Thursday, July 17
(one session) 9 a.m. to 5 p.m.
DBG's Morrison Center at 2320
East 11th Avenue, Denver

Please indicate your section on the registration form.

Pine needle baskets are an American Indian tradition of the southeastern United States.

Make a small bowl-shaped basket (and an optional lid, if time permits) in this one-day workshop.

This slow, thoughtful craft requires no equipment and minimal tools. Students will learn a variety of stitches and pine cone decorations. Baskets will be constructed from purchased longleaf pine (*Pinus palustris*) needles, from our Southeast coastal plains.

Please bring a sharp knife, small awl, towel and your lunch to class. No previous basketry experience is necessary.

Instructor: Robin Taylor Daugherty is a fiber artist with considerable teaching experience; she has taught weaving, spinning, felting, tapestry-making and basketry throughout Colorado and her work is exhibited widely.

Fee: \$28 members/\$31 non-members (includes \$8 for materials)

Limit: 10

Japanese Tea Ceremony

Section V: Sunday, June 8
Section VI: Saturday, June 14
Section VII: Sunday, June 22
(one session) 2 to 3 p.m.
Tea House in DBG's Japanese Garden

Please indicate your section on the registration form.

Because of its emphasis on such concepts as harmony, respect, purity, tranquility and elegant simplicity, the tea ceremony has for centuries been considered the epitome of Japanese life. This is an opportunity to experience an authentic tea ceremony in the quiet splendor of our Japanese Garden.

Instructor: Kathryn Kawakami has done much to inform Denver area residents and students about the culture of Japan. She will be assisted by William Crowder who studied the Tea Ceremony in Japan at Ura Senke.

Fee: \$4.50 members/\$5 non-members

Limit: 15

Drawing from Nature

Thursdays, July 3, 10, 17, 24, 31
August 7

(six sessions)

10 a.m. to noon Classroom B

Discover the excitement of expressing your love of nature through drawing. Instruction will cover basic drawing materials and techniques with an emphasis on tapping the unique creative vision of each participant.

No previous experience is necessary and materials can include drawing pencils, charcoal, colored pencils, pen and ink and pastels. Please bring drawing pencils and paper no smaller than 8½ x 11 inches to class.

Instructor: Lynette Swanson is a graduate of the Philadelphia College of Art and is a professional artist with national representation of her work. Teaching experience includes Metropolitan State College, Emily Griffith Opportunity School and Rocky Mountain College of Art and Design.

Fee: \$48 members/\$53 non-members

Limit: 12

Botanical Illustration: How to Draw a Flower

Tuesdays, July 1, 8, 15, 22, 29,
August 5

(six sessions)

9:30 to 11:30 a.m. Classroom B

If you have ever wanted to learn how to accurately portray flowers, this class is for you. Beginning students (even "non-drawers") with no previous experience will learn how to draw flowers and will progress to simple coloring with watercolors and colored pencils.

Different flowers from the many gardens at DBG will be used as subject matter each week as you learn to add more detail. Information on the various styles of flower drawing as well as a bit of history will also be provided.

Please bring several sharp drawing pencils and an eraser to the first class.

Instructor: Angela Overy received her National Diploma of Design from London University, England, and designed in London, New York and San Francisco before settling in Denver. Over the years, many DBG students have found a new interest and ability in her enthusiastic classes and lectures.

Fee: \$53 members/\$58 non-members (includes \$5 for materials)

Limit: 20



Pine Needle Basket

Goofy Garbage

Monday through Thursday

June 30-July 3

Section I: For children of ages 4-5
10 to 11:30 a.m.

Section II: For children of ages 6-7
1 to 2:30 p.m.

(four sessions) Classroom A

Please indicate your section on the registration form.

Egg creatures with alfalfa hair, invisible ink and carrot "ferns" are only a few of the amazing and sometimes hilarious things you can create with the leftover plant parts you might think are just "garbage." Become a plant scientist and perform experiments to see how plants respond to light, gravity and water.

Instructor: Karen Hostetter studied outdoor education at Earlham College and science education at the University of Texas. Formerly curator of education at the Heard Natural Science Museum and Wildlife Sanctuary in McKinney, Texas, she is an enthusiastic, experienced teacher.

Fee: \$25 members/\$27.50 non-members

Limit: 12

Plants and Little People

For children of ages 2-3 and an adult
Monday through Thursday,
July 14-17

10 to 11:30 a.m. Classroom A

Encourage your young child's excitement and curiosity as you explore the vast world of plants together. Using the five senses and special activities, participants will discover the wonderful world of summer at Denver Botanic Gardens.

Instructor: Karen Hostetter

Fee: \$30 members/\$33 non-members
(fee is for one child and one adult)

Limit: 6 children and 6 adults

Instructor
Richard Cohen
and "Dinosaur
Park—
Ceramics for
Kids" students



Prickles and Spines

Monday through Thursday,
July 21-24

Section I: For children of ages 4-5
10 to 11:30 a.m.

Section II: For children of ages 6-7
1 to 2:30 p.m.

(four sessions) Classroom A

Please indicate your section on the registration form.

Explore the spiny secrets of how some succulent plants survive in the desert and why flies, moths, bats and butterflies like to visit them. Plant a cactus garden to take home and taste the sweet and juicy fruit of the prickly pear.

Instructor: Karen Hostetter

Fee: \$25 members/\$27.50 non-members

Limit: 12

Fantasy Garden

Monday through Thursday,
July 28-31

Section I: For children of ages 4-5
10 to 11:30 a.m.

Section II: For children of ages 6-7
1 to 2:30 p.m.

(four sessions) Classroom A

Please indicate your section on the registration form.

What's in a name? Discover some of the interesting plants that are named for some unusual or outstanding feature as you explore the Garden in search of Old Man's Beard, Elephant Ear, Hens and Chicks, Tiger Jaws and Mother of Thousands. Solve riddles and puzzles and nickname your favorites in your own way.

Instructor: Karen Hostetter

Fee: \$25 members/\$27.50 non-members

Limit: 12

Denver Botanic Gardens
909 York Street
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

Registration Form for Classes and Field Trips

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

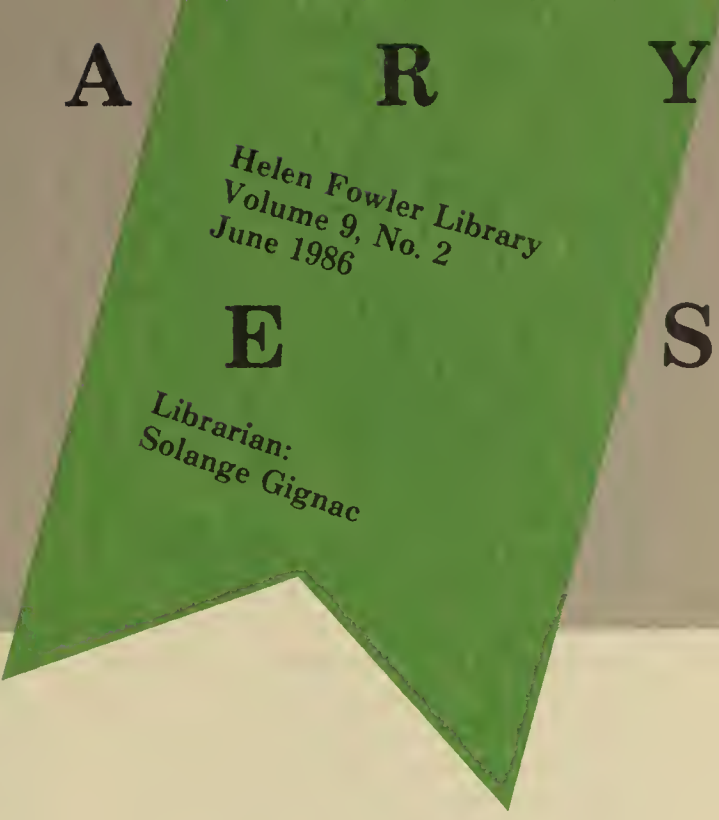
Name _____

Address _____

City _____ State _____ Zip _____

Home Tel. No. _____ Business Tel. No. _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No



A Garden of Wildflowers: 101 Native Species and How to Grow Them

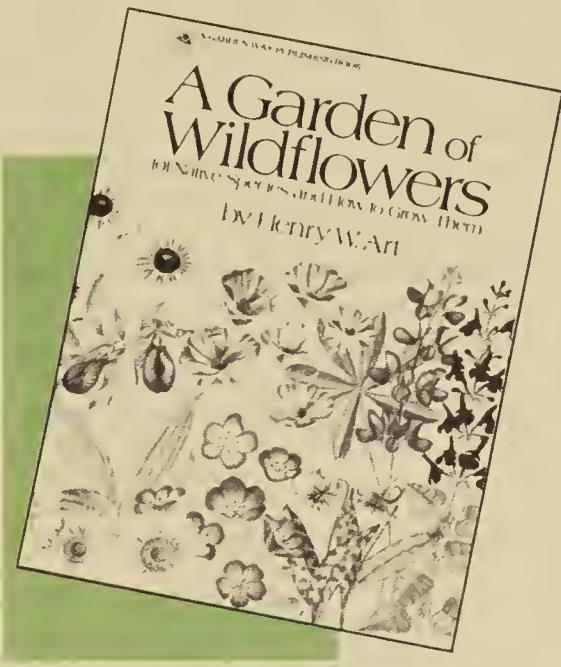
By Henry W. Art. Storey Communications, Pownal, Vt., 1986. \$12.95. SB 439 A78 1986.

"Why would anyone want to grow common native plants?" asks Henry Art, the author of *A Garden of Wildflowers*. "With the seed catalogs touting new hybrids every year, you would think native plant interest would be minimal." "Not so," says Henry and a lot of people agree. This 290-page, well-planned book provides all the necessary know-how to successfully grow 101 species of plants native to North America.

A very well-organized introduction provides a good background for everyone, including the uninitiated. It discusses getting a start, plant description, flowering season, flower grouping and arrangement, hardiness, culture, climate and propagation. All of this neatly prepares the new plantsman for this rather different type of gardening. Finally on page 53, we begin to see the 101 native plants. Two complete pages are used for each species, showing a shaded line drawing and listing all information in one place.

This is a good book as it includes more useful data than previous efforts on the subject. The chosen flowers from across the country are interesting and this big (8½ x 11) soft-covered book seems underpriced at \$12.95.

Bob Heapes



The Patio Garden

By Hazel Evans. Viking, New York, 1985. \$12.95. SB 473.2 E94 1985.

This lavishly illustrated book on patio gardening covers every aspect of the subject from construction, planting, furnishing and the general

REVIEWERS

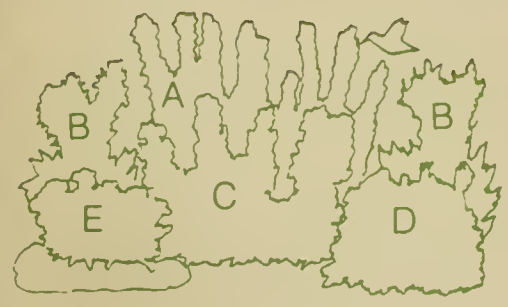
Bob Heapes—a well-known photographer and naturalist at Roxborough State Park

Solange G. Gignac—DBG Librarian

Gayle Weinstein—DBG Botanist Horticulturist

Joan Hinkemeyer—free-lance horticultural writer and DBG volunteer

Lynn Thompson—DBG Community Garden Coordinator



- A. Standing cypress
- B. Cardinal flower
- C. Scarlet sage
- D. Eastern columbine
- E. Indian pink

Hummingbird garden, spring and summer.





care and maintenance. All the plants described are illustrated by colored line drawings and general horticultural instructions and information on propagation, soil mixes, waterings, feeding, diseases and pests, routine care and maintenance is provided. The glossary will help the novice gardener understand the horticultural terms. An appendix provides lists of plants for special places and gives the time of flowering as well as lists of background and accent plants. The three indexes (general, common name and botanical name) will allow easy access to the reader of this excellent guide. The colored illustrations of numerous patio gardens with plans should provide inspiration to all who read this book.

Solange G. Gignac



The Weekender's Gardening Manual

By Patricia A. Taylor. Holt, Rinehart and Winston, New York 1986. \$19.95. SB 453 T 2859 1986.

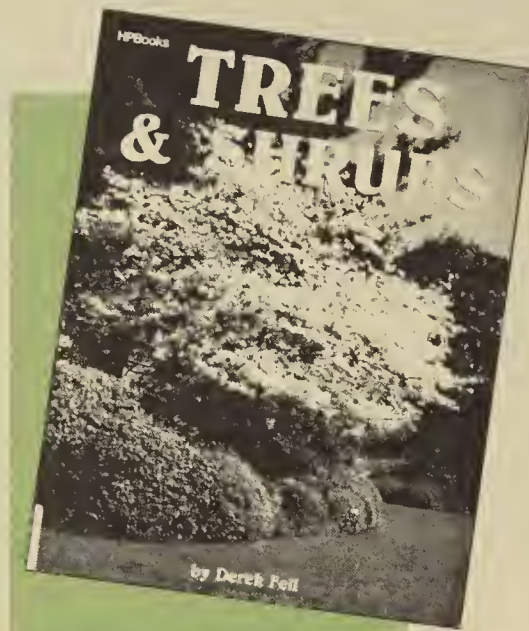
Can you imagine having a fine productive garden that requires only two hours of work per week? If this utopian idea interests you, this book is a must. The author assumes that readers are gardening neophytes and busy with many things. Thus, instructions are basic and simply stated.

Planting schemes for various types of flower and vegetable gardens, allowing for both sunny and shady locations, eliminate the need for time-consuming planning on the part of the gardener. Helpful

hints for soil preparation, pest control, watering, tool selection and coping with the vagaries of climate all serve to lighten the task of the gardener.

Finally, a myriad of brightly colored photographs will captivate even the most reluctant gardener and make the book a lovely browsing volume for indoor days.

Joan Hinkemeyer



Trees and Shrubs

By Derek Fell. HP Publishers, Tucson, 1986. \$9.95. SB453 F34 1986.

There are a variety of books out on trees and shrubs in the landscape so that if a new one is to compete, it should be equal to or superior to what is already on the market. Otherwise, it is just another book. And that is exactly what HP book *Trees and Shrubs* by Derek Fell is: just another book.

Over the past ten years, new information has been established regarding the proper planting and staking of trees. Since *Trees and Shrubs* was published in 1986, I would expect it to recommend current cultural practices rather than perpetuating information that is now considered passe.

There are several misleading statements throughout the book. For example, on page 7, the horticultural definition of perennials does not just refer to herbaceous material nor are tree peonies considered subshrubs.

To add insult to injury, the editing is quite sloppy. On page 12, the name of leather leaf mahonia is *Mahonia bealei*, yet under the illustration it is captioned *Mahonia japonica*. Although these are small errors, they are misleading and careless and may confuse the reader. The photography is excellent and there is some good information but that does not compensate for the lack of current information and the frequent inaccuracies.

Gayle Weinstein

Breeding Vegetable Crops

Edited by Mark J. Bassett. AVI Publishing Company, Inc., Westport, Conn., 1986. \$75.00. SB324.7 B74 1986.

Texts outlining the practical aspects of vegetable breeding techniques are scarce, especially those which offer specific methods in reference to vegetable crops. *Breeding Vegetable Crops* details modern genetic improvement trends for 14 crops (sweet potato, watermelon, pepper, tomato, cucumber, squash, snap bean, pea, carrot, onion, cabbage, lettuce, sweet corn and asparagus).

Written by separate authors, each chapter varies in the quantity and clarity of material. Consistently included in each is an introduction to the proposed food use, method of harvest, cultural system and intended environment—all the diverse needs and climates for which breeders are developing appropriate cultivars. Reproductive biology specific to each vegetable including flower types, method of pollination and ideal conditions for receptivity may prove useful to the amateur breeder or seed saver.

The author outlines sample approaches to developing an active breeding program, but the reader must fully understand the fundamentals of plant breeding including hybridization and screening techniques to accomplish the specific breeding objective based on the information provided. Sources of insect and disease resistance and specific genes which can be isolated for breeding are illustrated in helpful charts and narrative. The importance of these genes to the future desirability of each variety is emphasized when commercial marketing trends are reviewed. Each chapter has its bibliography; a good index provides easy access to the information and the book is illustrated. *Breeding Vegetable Crops* is appropriate for the amateur breeder who is willing to master the challenge of breeding concepts and an application of these methods.

Lynn Thompson

Alpines '86—You're Invited!

As part of the Second Interim International Rock Garden Plant Conference there will be a large exhibit and plant sale (principally rock alpine plants). Some of the exhibit material will also be for sale along with the largest selection of rock garden books available. These are coming directly from many sources including the American Rock Garden Society.

This once-in-a-lifetime conference is being held at the Events Center on the University of Colorado campus in Boulder. Come to the southeast corner of the campus on Sunday, June 29 to buy your plants and learn more about rock gardening.

The Events Center will be open from 9 a.m. until 4 p.m. and DBG's Assistant Director Andrew Pierce will gladly answer questions at 575-3751, ext. 18.



A Reminder—Renew Your Membership Today

As announced in the April newsletter, rates for new members increased as of April 15. Current members have until June 30, 1986 to renew at the old rate, so renew your membership now!

Remember: Our new category, Advocate (\$300), is now in effect. One of the special benefits of this membership and the Patron and Benefactor categories is two season tickets to the summer concert series. Members may upgrade their memberships to take advantage of this new benefit.

If you need further information, please call the Membership Office at 575-3751, ext. 22.

Gardening Tips for June

Of the many landscape plants categorized by form, vines are the most versatile. They are a type of adaptive plant behavior in which the weakness of their stems is their strength for survival. As the plant world evolved, those that could not compete for light either scrambled on the ground or climbed above the trees.

Vines are basically modified shrubs with elongated internodes and weak stems incapable of supporting vertical growth without support. In fact, they are often classified by the way they climb or the type of support they need. Research on vines has shown that there are over 30 methods by which vines climb, but for the purpose of this article we will be concerned with only two: the rooters and the graspers.

The rooters produce clusters of roots along the branches and stems

and are able to affix themselves to moist surfaces. These types of vines also make good ground covers because they creep along the soil and root as they go. An example is English ivy.

The grasper is the larger of the two categories. In this group are subcategories consisting of the twiners, clingers and stickers. The twiners wrap themselves around a vertical support. Wisterias and honeysuckles are two examples. The clingers produce tendrils, which are modifications of leaves or other plant parts, that coil around an object. Clematis and grape are two examples. The stickers are somewhat like climbers in that at the end of the tendrils or rootlets are disk-like cups that attach to flat-surfaced areas. The well-known Boston ivy is such a vine. The following is just a sampling of vines that have done well in the Denver area.

Rooters

<i>Hedera helix</i> (English ivy)	broadleaf evergreen
<i>Euonymus fortunei</i> 'Vegetus' (wintercreeper)	broadleaf evergreen, orange fruits
<i>Hydrangea anomala petiolaris</i> (climbing hydrangea)	white flowers, glossy green foliage, very slow growing

Twiners

<i>Akebia quinata</i> (fiveleaf akebia)	excellent for neatness and foliage
<i>Polygonum aubertii</i> (silver fleece vine)	rapid grower, white flowers in late summer
<i>Wisteria sinensis</i> (Chinese wisteria)	blue-violet, fragrant flowers, woody trunk

Clingers

<i>Ampelopsis brevipedunculata</i> (porcelain vine)	deeply lobed leaves, colorful blue to purplish fruit in fall
<i>Clematis paniculata</i> (sweet autumn clematis)	white fragrant flowers in late summer, rapid grower, fine twigs
<i>Clematis tangutica</i> (golden clematis)	yellow flowers in June and July, rapid grower, plumose seed heads in early fall

Stickers

<i>Parthenocissus tricuspidata</i> (Boston ivy)	clings to stonework, red fall color
<i>Parthenocissus tricuspidata</i> 'Lowii'	small foliage, less vigorous

There are a number of uses for vines. They act as a screen, cover walls or fences, overhang arbors and pergolas, add interest to trees or shrubs, accent small narrow spaces, enhance floral dimension and hold steep banks or act as a ground cover. There are many commercially available vines but before any selection is made, it is important to review why they are needed and how they will be supported.

Gayle Weinstein
Botanist Horticulturist
at Denver Botanic Gardens




Brian Sine constructs the new arbor in our Scripture Garden.

C JUN

Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

African Violet Society, 4th Thurs. of 7 months; **Bonsai Society**, 1st & 3rd Tues.; **Cactus & Succulent Society**, 2nd Tues.; **Civic Garden Club**, 1st Fri.; **Colorado Native Plant Society**, 4th Wed.; **Gloxinia Gesneriad Growers**, 1st Sat.; **Hemerocallis Society**, 3rd Sun. of 4 months; **Ikebana International**, 4th Fri.; **Iris Society**, spring & fall dates; **Men's Garden Club**, 4th Thurs.; **Mycological Society**, 2nd Mon.; **Orchid Society**, 1st Tues.; **Rock Garden Society**, 3rd Wed.; **Rose Society**, 2nd Thurs.; **Ultra Violet Club**, 4th Mon.; **Water Garden Society**, 2nd Sun. of 5 months

A	L	E	N	D	A	R
S	M	T	W	T	F	S
1	2	3	4	5	6	7
Bird Courtship		<i>Alpine Wildflowers drawn by Janet L. Wingate.</i>				Tree Walk at Washington Park
8		10	11	12	13	14
Japanese Tea Ceremony, Water Garden Plant Auction						Japanese Tea Ceremony, Bonsai Society Show
15		16	17	18	19	20
Bonsai Society Show		Free Day, Young Audiences Concert, Flora and Fauna of Colorado's Life Zones	Plant Life Field Trip: Mount Falcon Park, Jefferson County			Summer Kick-Off, Weed Identification
22	23	24	25	26	27	28
"The Magic of Herbs," Japanese Tea Ceremony				The Gardens' Brass Ensemble		Wildflower Identification Scarecrow Contest June 28-30 Western American Wildflowers June 28-July 6 International Rock Garden Conference
29	30					
Succulents of South Africa	Goofy Garbage					

Coming Next Month

July 1
Young Audiences Concert, Botanical Illustration
July 9
Alpine Ecology

July 10
The Blair String Quartet: Music from the Aspen Music Festival

July 15
Young Audiences Concert

July 17
Alpine Botany & Animal Adaptations, Pine Needle Basket, Free Day

July 23-27
Colorado Watercolor Society Show and Sale

July 24 or 25
The Colorado Philharmonic: The National Repertory Orchestra

July 26
Terrace and Garden Tour

Denver Botanic Gardens, Inc.
909 York Street
Denver, Colorado 80206
303-575-3751

June 1986

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Denver Botanic Gardens

August 1986

Number 86-8



NEW S



Photo by Deane Hall

Rocky Mountain Alpines Published

Rocky Mountain Alpines has arrived! This splashy new, large-format book was sponsored by Denver Botanic Gardens, the American Rock Garden Society and its Rocky Mountain Chapter in conjunction with the Second Interim International Rock Garden Plant Conference held in late June.

The book marks a significant turning point in the horticultural perception of alpine plants. Never before has the extraordinary wealth of native Rocky Mountain plant material been dealt with so exhaustively with the gardener in mind. From the northern tip of the range in Canada to its terminus in New Mexico, experts residing in each region have contributed authoritative accounts of the indigenous alpine flora.

In addition, articles by leading rock gardeners on growing Rocky Mountain alpine in other regions of North America, the British Isles, the continent of Europe and Japan are included. *Rocky Mountain Alpines* contains historical and geographical information, cultivation and propagation instructions and landscaping advice for these beautiful and diverse plants.

Many photographs highlight the plants in the wild as well as in gardens: There are 32 pages in color and nearly every other page has a black and white picture.

Rocky Mountain Alpines has been published by Timber Press of Portland, Oregon. This lovely 316-page book sells for \$35.00 and is available in the DBG Gift Shop. Add this gorgeous reference book to your collection and support the Gardens at the same time.

Inside:

*Rose Society
Show page 2*

*"Glass at the
Gardens"
page 3*

*August-
September
Concert
Schedule
page 4*

*Mushroom
Fair page 6*

*Great
Getaways
page 7*

*Classes for
adults page 8*

Youngster at
last year's
Asian
Festival
Children's Day



Roses, Roses and More Roses

The annual Rose Show is scheduled for Sunday, August 31, in John C. Mitchell II Hall. Featured will be one-bloom-per-stem teas, grandiflora and floribunda sprays, climbers, shrubs and miniatures. "Best of" winners from many categories and divisions will be found throughout the Hall. Anyone can enter the competition.

Show information and schedules can be obtained by contacting Jo Kendzerski, 987-2333, or Susan Bishop, 690-7144. Judging takes place in the morning and the show opens to the public from 1 to 4:45 Sunday afternoon. There is no charge to enter this show other than the non-member gate admission.

Plant and Produce Sale

Saturday, September 6, is the day members of the Denver Men's Garden Club gather to sell their produce. Businessmen and retirees will congregate at the Botanic Gardens House from 9 until 4, or until they sell out. In addition to the sale of garden-fresh tomatoes, corn and other produce from their home gardens, they will be selling perennials. Proceeds from this sale help benefit DBG.

Feed Your Feathered Friends

If you purchased a bag of the #1 Birdseed Choice of Colorado Birds at the plant sale, you might need to order for winter. There is a reorder coupon with each bag, so send now and don't let your feathered friends go hungry when the cold winds blow

Tributes

In memory of Betty L. Kerr
Mr. & Mrs. William G. Lauer

In memory of Frank King
Ms. Linda Benson
Ms. Rhoda J. Binner
Ms. Mona Bottorff
Mr. & Mrs. Gordon Callbeck
Mrs. Jean FitzGerald
E. J. Mehlin

Lester & Doris Nelson
Mr. & Mrs. Marvin Strobel
Mr. & Mrs. Phil Valdez

In memory of Carol Miller
Michael & Cathy Curran
Ed & Raeann Lampert
Rick & Amy Schechter
Ms. Lisa Tasner

In memory of Lisa Mitton
Mr. & Mrs. Harlan H. Holben

In memory of Fred Neef
Mr. & Mrs. Harlan H. Holben

In memory of Mrs. William (Grace) Wierman

Mr. & Mrs. Ted Boerstler
Mr. & Mrs. Barkley L. Clanahan
Mr. & Mrs. Emerson Ellett
Dr. & Mrs. Roger Wotkins

Gardens Wins 1986 "Best" Award

Denver Magazine each year publishes their choices of the "best" and "worst" in Denver. The Botanic Gardens was singled out as "the best picnic grounds." Thanks, Denver.

Green Thumb News Number 86—8 August 1986

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than July 18 for September, August 20 for October and September 19 for November.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.



Members' 1986 Plant Giveaway September 5-6

Following last year's successful fall plant giveaway, we are again offering a selection of plants for members to choose from. Times of pick-up are similar to previous years, Friday from 8 a.m. to 4 p.m. and Saturday from 9 a.m. to 12 noon. This year we are relocating to serve you better, and you will find us outside the Gift Shop where some shade can be provided for your comfort.

During the last few years we have begun introducing smaller plants in multiple packs and we will again have various rock garden selections available for you in packs of four and six. Panayoti Kelaidis, our Rock Alpine Garden curator, has selected some of his best for your enjoyment.

One group of small trees and shrubs that are not grown enough are lilacs. Many of us know the main group of varieties in the so-called French lilac group, but species such as *Syringa lacinata*, *S. pekinensis*, *S. meyeri* and *S. wolfii* are less known. The last two are small shrubs, while the former can resemble a tree.

Also included in our outside selection is the Amur cork tree, *Phellodendron armurensense*, a tree that can grow up to 40 feet. Not well known in Denver, this tree from Japan and northern China is grown for its corky bark, attractive foliage and black fruit that smells like turpentine when crushed. Other plants will be available, although they were not all determined by press time.

As in the past, plants for house collections will also be provided. One offering, and one of the most successful palms in the Conservatory, is the bamboo palm or *Chrysalidocarpus lutescens* and we have grown seedlings from our own seed crop. Hibiscus is always popular and several varieties will be available along with an unusual form of another common houseplant, monstera or cheriman. Trailing plants of *Aeschynanthus* "Black Pagoda," a member of the African violet family, can be used for small hanging baskets. A succulent plant that has no spines and is closely related to the Christmas cactus can also be used in hanging baskets. This plant, as *Rhipsalis rosea*, is easy to grow.

As a special treat, for those who consider themselves real houseplant growers and enjoy small challenges, we have a selection of *Phalenopsis* or moth orchid. This is one of the



Community Gardener Priscilla Hawthorne, works on her garden plot.

easiest indoor orchids to care for, although they still require correct growing conditions and more care than many of the common houseplants. We are hoping to have some small ferns and a few other items, though they will be in small quantity. Again, it is first-come, first-served throughout the two-day giveaway.

Please bring this newsletter, along with your current membership card, to make your selection the first Friday and Saturday of September. Care sheets on the plants offered will be provided.

Listen to KVOF

Every Friday morning about 8 o'clock you can hear the latest on Garden activities by turning on your radio to KVOF, 99.5 FM. The Gardens is sponsoring "This Week in Denver" every Friday morning with a 60 second ad. It is amazing how much information one can pack into 60 seconds. Tune in.

"Glass at the Gardens" Show August 7-10

A beautifully worked piece of glass art can complement both the exterior and interior of a house. At Denver Botanic Gardens, glass objects ranging from stained glass windows and room dividers to lamps and jewelry will be available for purchase August 7-10.

In John C. Mitchell II Hall the Glass Artists Fellowship will stage their popular exhibit and sale. Hours will be 9-4:45 except on Saturday, August 9, when the hours will be extended to dusk to accommodate extended evening hours. Only the non-member gate fee will be required to enter this show and sale. Plan now to see why stained glass art has become so popular.



Boulder Bassoon entertains at the 1985 Garden Concert Series.

Concerts at the Gardens Continue Into September

Concerts in Denver Botanic Gardens' amphitheater continue through August and into September. The 1986 Garden Concert Series, presented by Denver Botanic Gardens, KCFR 90.1 FM and United Bank of Denver, is as follows:

The Boulder Bassoon Band

Thursday, August 7 or Friday, August 8 at 7:30 p.m. (rain date—Sunday, August 10 at 10 a.m.) Gate opens at 6 p.m. *Tickets on sale starting Monday, July 28.*

A favorite last summer, they're back for two nights. This is a group of fantastic musicians with a witty, tongue-in-cheek approach to their performance. Hear six bassoonists led by RCA Records recording artist Bill Douglas. This is going to be fun!

Dizzy Gillespie and the Garden All-Stars

Thursday, August 21 or Friday, August 22 at 7 p.m. (rain date—Sunday, August 24 at 10 a.m.) Gate opens at 5:30 p.m. *Tickets on sale starting Monday, August 11.*

The incomparable jazz trumpet master, Dizzy Gillespie, performs for two nights at DBG! Mr. Gillespie will join a 15-piece jazz

orchestra together just for this auspicious occasion. "The Garden All-Stars" are exactly that—the very best jazz musicians in the area. Many you've seen and heard in clubs and concert halls throughout the area. "A Night in Tunisia," "Woody 'n You," "Manteca" and a host of great Dizzy Gillespie compositions will ring through the Gardens' amphitheater. Note: Should it be necessary to make use of the rain date, "The Garden All-Stars" will perform without Mr. Gillespie.

The Cleo Parker Robinson Dance Ensemble

Thursday, September 4 or Friday, September 5 at 7 p.m. (rain date—Sunday, September 7 at 10 a.m.) Gate opens at 5:30 p.m. *Tickets on sale starting Monday, August 25.*

Cleo Parker Robinson's Dance Ensemble was clearly a popular performance in last year's series. They hold the distinction of being Colorado's first full-time, professional modern repertory dance company and have toured to great acclaim since their founding in 1971. They are guaranteed to provide two exciting evenings of dance and music.

The Cleo Parker Robinson Dance Ensemble concludes this memorable concert season and with it you can look forward to the concert season of 1987.

For complete details on fees and where to obtain tickets, please refer to the *May Green Thumb News* or call 575-3751 for information.



Conservatory Guide Class Begins September 30

Anyone interested in joining the Gardens' dedicated group of volunteer Conservatory Guides should note this date in their calendars. Classes begin on Tuesday, September 30. These 10-week classes start at 9:30 a.m. each Tuesday and end around 11:30 a.m. Watch your September *Green Thumb News* for

details on registration for these classes as well as brush-up classes for former guides and a schedule of the "brown-bag" monthly continuing education program for new and former guides.

Cleo Parker Robinson Ensemble, a big hit at the 1985 Garden Concert Series

DBG Welcomes 1986 Summer Interns

With career hopes of eventually working in public greenhouses or with extension services, our nine summer interns began their 10-week program at Denver Botanic Gardens. A warm welcome is being extended to these enthusiastic students who began their internship on June 16 and who will remain with us until August 27.

Throughout the 10 weeks they will have the opportunity to gain a thorough knowledge of the daily operations of a public display garden. Students this year are: Maurine Bettner (University of Southern Colorado), Kathy Chambliss (University of Delaware), Katherine Feasey (Cornell University), Catherine Hoyt (University of Northern Colorado), Terri Ann Huck (Front Range Community College), Pamela Kittelson (Colorado College), Doug Madsen (Montana State University), Ross Murdock (Utah State University) and Michael Satterfield (Metropolitan State College).

Each week they will rotate through the various sections of the Gardens, becoming acquainted with procedures required to either allow for an efficient operation of a botanic garden or to maintain a public-pleasing display. In addition to working side-by-side with our professional staff and volunteers, they



1986 DBG interns, left to right, back row—Pamela Kittelson, Ross Murdock, Doug Madsen, front row—Terri Ann Huck and Michael Satterfield

attend educational activities that include field trips.

A valuable exchange of horticultural and botanical information occurs between the students and staff through our intern program. Please join us in welcoming them.

Therapeutic Horticultural Programming for Nursing Home Residents

An all-day workshop for activity directors, social services designees and adjunctive therapists of nursing homes will be offered at DBG's Morrison Horticultural Demonstration Center on August 15.

The workshops will introduce practical approaches to horticultural activities that meet the needs and abilities of nursing home residents. Workshop objectives will be client goal setting and program development. Hands-on horticultural experience will include seed planting and different methods of propagation; container and raised bed gardening; adaptive tools and their construction; slide shows of existing programs and a tour of the Morrison Center's Sensory Garden.

A registration fee of \$25 includes a luncheon. Contact Judy Carrier, H.T.R., or Katrin Faatz, horticultural therapy intern, at 575-3751 for more information.

1986 DBG interns, left to right, back row—Katherine Feasey, Maurine Bettner, front row—Catherine Hoyt and Kathy Chambliss



Plant and Book Sale Best Ever

More than 20,000 people visited the Botanic Gardens during Plant Sale weekend May 9 and 10. They not only bought plant material in record numbers, they strolled throughout the Gardens, lolled on the amphitheater grass to picnic and listen to music, reveled in the Rock Alpine Garden's May beauty and enjoyed watching the young duck family in our Japanese Garden.

Strolling vegetables and a water flower in red boots selling raffle tickets, a stilt walker impressing young and old, music, exhibit booths demonstrating garden related items, colorful banners and perfect weather on Saturday all lent to the festive atmosphere. Book sales reached a record \$14,500 and plant sales were up 20 percent over 1985. This money goes directly to help cover operating expenses at DBG.

The public was conscientiously careful of the planted flower beds and, considering the thousands of people who came through and the number of plant booths erected, little damage was done. A great round of thanks goes to this year's co-chairmen Virginia Knowlton and Ralph Moore!

DBG's Home Demonstration Garden



"Art in the Gardens"

New this year, in an effort to extend the appeal and knowledge of the Annual Plant and Used Book Sale, was our "Art in the Gardens" poster contest.

As reported in the May newsletter, Carolyn Crawford of Littleton was the winning artist. Her pastel of orchids and books makes an elegant and particularly beautiful poster for 1986.

Her original, and the original art of the contest finalists, was on exhibit and for sale in John C. Mitchell II Hall April 22 through May 4. The opening reception on the evening of the 22nd was a benefit for DBG. Thirty percent of the sale price of the paintings sold and monies from the reception fee added substantially to the Annual Plant and Used Book Sale profit.

Plans are already underway through our Marketing Department to make the poster contest an annual event, so spread the word among your artistically inclined friends.

Table Setting Display for "Greening of Denver"

On December 5 and 6, the Garden Club of Denver, Denver Botanic Gardens and Historic Denver, Inc. will join forces in raising funds to implement a landscape plan for lower downtown Denver.

This landscape project, "Greening of Denver," will be launched this Christmas season with an extravagant display of table settings. The locale is a recently restored landmark, the Ice House, at 1801 Wynkoop, one block east of Union Station.

Table settings will complement the showrooms of world renowned designers (and Ice House tenants) Stroheim and Romann, Kneeder-Faucher, Eurobath and Tile, and Thomas N. Grant, Co.

Mark your calendars to celebrate this unique holiday occasion and look for more details in the September newsletter. Tickets for this event will be sold at 59 King Soopers locations.

11th Annual Mushroom Fair

Late summer and early fall are excellent times to visit the mountains and back country of Colorado. Many hikers, unfortunately, go unprepared with little knowledge of the fruiting fungi that grow on the damp forest floors. To help prevent accidental poisoning by mushrooms, the Colorado Mycological Society has offered a mushroom fair for the past 10 years. This year's fair will be held in John C. Mitchell II Hall on Sunday, August 17, from 11 a.m. until 5 p.m.

On the Saturday prior to the fair, club members will venture into the forests to gather mushrooms for identification. Members will also be available to explain whether these samples are toxic or edible and to offer hints on how to determine these important traits. Mushroom-related arts and crafts, books and T-shirts will be for sale.

The public is invited to view the wild mushrooms on display and to bring any mushrooms they have found for identification. This Fair is free and open to the public upon entry to Denver Botanic Gardens.



"Number One Tree" Dedicated at Gardens

On April 23 "Higara-shi-no-matsu" was potted during the proper Japanese ceremony in our Japanese Garden. DBG's Japanese Garden Specialist Kai Kawahara was the team leader and he was assisted by Mrs. Kataoka, Mr. Sasaki and Mr. Jackel.

The tree, a ponderosa dwarfed by nature, is thought to be over 1,000 years old and was discovered by Dick Meleney in October of 1983 on Elk Creek Ranch near Estes Park. Meleney calls it the most astounding tree he has seen in 30 years of collecting and growing bonsai. Mr. Kawahara and others in the Bonsai Society refer to it as "Number One Tree."

A large oval pot, in itself quite rare, was made by Matsushita in Japan especially for the incredible tree. The potting ceremony was held in memory of Bonsai Master, one of the founders and past presidents of the Rocky Mountain Bonsai Society, Mr. Kataoka. Matt Mateyka of Channel 4 did a special segment on the ceremony, which aired April 25.

Meleney hopes "Higara-shi-no-matsu" will be recognized as an American art treasure. Where its permanent home will be, no one knows for sure. Mr. Meleney also took the tree to the International Bonsai Show in Washington, D.C., in July and the National Arboretum in Washington has expressed interest in having this special Colorado tree in its permanent collection.



Tai Chi exercises in DBG's Rock Alpine Garden

Great Getaways: "Orchid Isles and Asian Gardens Tour"

In March 1987, the "Orchid Isles and Asian Gardens Tour" will visit Hong Kong, Sabah (North Borneo), Singapore and Thailand. Planned in conjunction with the 12th World Orchid Congress which will be held in 1987, in Tokyo, the tour is a pre-Congress opportunity to experience the exotic gardens and cuisines that these countries offer.

Those not planning to attend the Congress will have the options of either returning to the United States or extending their tour by making individual arrangements with Travel Associates.

The tour, which departs Denver on February 28, will be accompanied by DBG's Executive Director Merle M. Moore and orchid specialist, Botanist-Horticulturist Larry Latta.

For additional information, including reservation form, itinerary and cost, please contact Travel Associates, Inc., 7007 East Hampden Avenue, Denver, Colorado, 80224, Attention: Ginny Beale. A deposit of \$500 per person, accompanying the completed reservation form, will be required to reserve space on this tour.

Rock Alpine Garden Site of Tai Chi Exercises

At 7:45 a.m. on May 13 the sun was attempting to break through the heavy morning mist. The backlit alpine flowers were dripping from nature's gentle watering. A group of Chinese visitors were doing their traditional morning Tai Chi on the paths of the Rock Alpine Garden. The stillness of the garden was further enhanced by the slow, studied motions of the exercises.

The Chinese delegation had come from Kunming, in Yunnan Province of China, to do their morning exercises. Their scheduled stop at Denver Botanic Gardens was part of a week-long visit to Denver to commemorate a new "Sister Cities" pact. Kunming has been declared Denver's newest "Sister City," effective May 15. There are many similarities in that Kunming is 6,200 feet above sea level (although tropical), the two cities are close in size and there is great interest in alpine flowers of the nearby mountains.

The Kunming delegation consisted of their Deputy Mayor, Deputy Director of Foreign Affairs and the Deputy Director of the Standing Committee of People's Congress of Kunming government and, although each spoke some English, an official interpreter accompanied the group.

Could it be that our Executive Director, Merle M. Moore, who visited Kunming last October to meet their Horticultural Institute's director and other city officials, had anything to do with this illustrious visit? He's not saying, but the entire DBG staff now has an invitation from high places to see Kunming and to study at their Horticultural Institute.



*Kai Kawahara,
DBG's
"Number One
Bonsai Man"*



Deciduous Shade and Ornamental Trees for Denver

Tuesdays, September 16, 23, 30,
October 7, 14

Classroom C 7:15 to 9:15 p.m.

Field Trip on Saturday, October 18
from 9 a.m. to noon
(six sessions)

Due to this unique climate, very few trees are actually indigenous to the Denver area. It is not so much cold hardiness but soil, moisture, humidity and extreme fluctuations in temperature that make it so difficult for trees to survive.

This class will acquaint students to a variety of plant materials and will establish an understanding of their characteristics, natural history, culture, problems and landscape value.

Through the use of slides, students will observe each of approximately 100 species, with an emphasis on fall characteristics. A field trip is included for a first-hand look at some of the species discussed in class.

Instructor: Jeffrey Frank studied horticulture at Pennsylvania State University and earned a masters degree in landscape architecture from the University of Virginia. He is presently in private practice in Denver.

Fee: \$45 members/\$49.50 non-members

Limit: 20



Common
bramble from
*Elements of
Botany Part I.
Classification*
by R. J.
Thornton,
M.D., 1812
from the
Waring Rare
Book Room

Mountain Grasses at the Walter S. Reed Botanical Garden

Sunday, August 17
9 a.m. to 3 p.m.

Grasses are often considered a difficult group to key, but once one understands their basic floral structure, this plant family becomes comprehensible and fascinating. Come and learn to identify mountain grasses at DBG's Walter S. Reed Botanical Garden located near Evergreen at an elevation of 7,500 to 8,000 feet. Nodding brome, purple reed grass, sweet grass, mat muhly and rice grass are just a few of the grasses to be seen. Bring a hand lens and lunch.

Leader: Janet L. Wingate, M.S. and Ph.D. in botany from the University of Oklahoma, is currently on the DBG staff working in the Kathryn Kalmbach Herbarium.

Meet: at 9 a.m. at the main DBG parking lot to carpool and receive directions.

Fee: \$2.50 members/\$3 non-members

Limit: 15

Janet Wingate
(in hat) leads
DBG interns
on grass identification field trip.

Identifying Plant Parts

Monday, August 25 and
Thursday, August 28

(two sessions)

6:30 to 9 p.m. Classroom B

In this class for beginning botanists, students will learn how to identify the different root, stem, leaf and flower structures. Can you tell a bulb from a corm? What is a rhizome and what plants typically have them? How about leaves? Are they simple or two times pinnately compound and is their shape cordate or lanceolate? Can you distinguish a panicle from a raceme?

By learning a better botanical descriptive vocabulary, you will find using a plant key much easier; some keying will occur in class. Please bring a hand lens if you have one.

Instructor: Tina Jones is a wildlife instructor who teaches at the University of Colorado and the Denver Museum of Natural History as well as DBG. She has many years of field experience.

Fee: \$20 members/\$22 non-members

Limit: 20



*Tulip gentian,
Eustoma
russellianum
by Emma A.
Ervin*

Gentian Foray at South Park

Saturday, August 9
9 a.m. to 4 p.m.

The Jefferson/South Park area is a spectacular location to observe some of the late summer wildflowers such as gentians. A profusion of other late bloomers is expected at this 9,000-10,000 feet altitude. Don't forget to bring drinking water and a lunch.

Leader: Richard Schwendinger has been leading field trips throughout North America and Alaska for over 25 years.

Meet: at 9 a.m. at DBG House parking lot to carpool and receive directions.

Fee: \$2.50 members/\$3 non-members

Limit: 15

Plant Life Field Trip: Golden Gate Canyon State Park

Wednesday, August 20
9 a.m. to 4 p.m.

This is an opportunity to observe some of our prettiest late summer wildflowers at their peak. In the Bootleg Bottoms Campground area composites such as sunflowers, Porter's asters and goldenrod will be especially impressive, as well as lupines, tall blue penstemons, fireweed and Indian paintbrushes. Don't forget your lunch.

Leader: Mary Edwards, a volunteer at the Kathryn Kalmbach Herbarium at DBG, is a botanist who has been leading field trips for eight years.

Meet: at 9 a.m. at the main DBG parking lot to carpool and share gasoline expenses. A daily user pass must be purchased for each car entering the park.

Fee: \$2 per person

Limit: 20

Perennial Garden Walk

Section II: Tuesday, August 12
Section III: Tuesday, September 2
(one session) 6 to 8 p.m.

Please indicate your section on the registration form.

Each evening stroll throughout the perennial plantings at Denver Botanic Gardens will provide an opportunity to observe these marvelously versatile plants. An experienced perennial grower, Mr. Pierce will offer tips on growth habits and culture that you can incorporate into your own garden. An informal question and answer approach is planned.

Instructor: Andrew Pierce is a horticulturist and assistant director of DBG. He is an accomplished grower of perennials and alpine plants.

Meet: promptly at 6 p.m. outside the Education Building.

Fee: \$5 members/\$5.50 non-members

Limit: 20



Dry It. You'll Like It.**Tuesdays, August 12, 19****(two sessions)****9:30 to 11:30 a.m. Classroom B**

Dahlias, zinnias, roses and black-eyed Susans are among the flowers whose beauty you will learn to preserve in silica gel in this class. Students will select and dry garden and roadside flowers for use in winter arrangements.

Please bring two plastic shoe boxes with lids, a small plastic bucket with a handle, scissors, clippers, wire cutters, a small soft artist's brush and an empty three-pound coffee can with lid. All other materials, including flowers, will be provided.

Instructor: Avalonne Kosanke

Fee: \$26 members/\$28 non-members (includes a \$10 materials fee)

Limit: 20**Japanese Tea Ceremony****Section VIII: Saturday, Aug. 9****Section IX: Sunday, Aug. 17****Section X: Saturday, Aug. 23****Section XI: Sunday, Aug. 31****Section XII: Sunday, Sept. 7****Section XIII: Saturday, Sept. 13****Section XIV: Sunday, Sept. 21****Section XV: Saturday, Sept. 27****(one session) 2 to 3 p.m.****Tea House in DBG's Japanese Garden**

Please indicate your section on the registration form.

Because of its emphasis on such concepts as harmony, respect, purity, tranquility and elegant simplicity, the tea ceremony has for centuries been considered the epitome of Japanese life. This is an opportunity to experience an authentic tea ceremony in the quiet splendor of our Japanese Garden.

Instructor: Kathryn Kawakami has done much to inform Denver area residents and students about the culture of Japan. She will be assisted by William Crowder who studied the Tea Ceremony in Japan at Ura Senke.

Fee: \$4.50 members/\$5 non-members**Limit:** 15**Watercolor and Mixed Media Painting**

Section I: Wednesdays, August 13, 20, 27, September 3, 10, 17 from 9:30 to 11:30 a.m.

Section II: Saturdays, August 16, 23, 30, September 6, 13, 20 from 1:30 to 3:30 p.m.

(six sessions) Classroom B

Please indicate your section on the registration form.

Translate your vision of nature into exciting color! Wet-in-wet techniques as well as painting on dry paper will be demonstrated. From quick gestures to slow contemplative studies, students will explore the rich world of nature at Denver Botanic Gardens. Instruction and demonstrations in assorted media, including pastels, will be provided.

Instructor: Oksana Ross, Ph.D., studied at New York University and Columbia University and has 32 years of teaching experience. She was formerly on the faculty of the University of Colorado at Denver, Metropolitan State College and Colorado Women's College.

Fee: \$48 members/\$53 non-members**Limit:** 20

Watercolor and Mixed Media student, Diane Jacobian

**Denver Botanic Gardens
909 York Street
Denver, Colorado 80206**

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

Registration Form for Classes and Field Trips

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Address _____

City _____ State _____ Zip _____

Home Tel. No. _____ Business Tel. No. _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No

Gardening Tips for August

In the conventional garden there's something of a lull between the flowering of the bearded iris and that of the daylilies—that is, the genus *Hemerocallis*—and between the daylilies and chrysanthemums. Yet, there's a group of marvelous plants, with all the excellent qualities of those traditionally dominant perennials, which not only fill these yearly gaps but overlap and extend their seasons of color. These are the true lilies.

Though popular along both coasts of the United States, as well as in Europe and the temperate Orient where the majority of today's hybrids' ancestors originated, few have been taken to the hearts of Denver gardeners. It's an unfortunate oversight and Denver's gardens are the poorer for it.

Is it the charming symmetry of their gracefully flaring blossoms which lends lilies their reputation of delicate behavior? If so, gardeners of our region would better observe the lilies' bold stature, their striking waxy colors and the strength of their glossy green leaves as indications of their true, tough nature. Many not only survive in our High Plains environment, but thrive. Planted in good soil, with due consideration given to their needs for water, fertilizer and sunshine, they multiply into magnificent colonies. In your garden they can provide a perennially dramatic focus from spring into fall.

Members of the genus *Lilium* have been divided by horticulturists on both sides of the Atlantic into different sections according to their specific ancestry. These formalized divisions serve us well in discussing their horticultural merits. However, of the nine divisions, only five are major enough to warrant our interest in a garden discussion this brief.

By far the sturdiest, the most dependable and the best suited for most landscapes in our area, and the most brilliantly hued, is the first division, Asiatic hybrids. Breeders in the United States, especially the Pacific Northwest, have worked diligently to create a perfect garden lily and in these they have almost succeeded. Mainly of warmer tones of yellow and orange, decorated with dark, contrasting spots, their color range has recently been extended to mahogany-red, pink and white. They bloom, depending upon variety, from early June into July. Because of extensive interest in their hybridization, they are available in an array of moderate heights from 15 to 48 inches and with several



inflorescence habits. Flowers held upright or facing outward from their stem are the most useful in cut arrangements, although those that nod from the tips of their pedicels are also attractive growing outdoors.

If you desire fragrance, another lily division may serve you better. Those of the Aurelian section release their spicy fragrances into the mid-summer air in abundance, and can grow to eight feet high. Their tall stems should be staked against both wind and the weight of water. Handled this way, their trumpet-shaped flowers of white, pink or yellow can provide a regal display.

In August, when the large sun-burst flowers of the Oriental hybrids light up your daytime garden, you will gain a new appreciation of a floral fragrance that can only be described as exquisite. The fragrance persists into the evening air long after the flamboyant blossoms have been cloaked in the darkness of a warm summer night. They too are usually tall growers, though their stems are relatively thin. Newer hybrids of this section offer shorter plants in the traditional sparkling white through the deep crimson color ranges.

Although not as highly developed as the above divisions, American hybrids should be considered for their floriferousness, their charming, nodding flowers and their value as cut flowers. Though relatively small as lilies go, their blossoms continue to open in succession to make long-lasting bouquets. They can sometimes grow quite tall, but their delicate appearance keeps them in scale with the most intimate of gardens.

The final division to be considered here is the species. There are nearly 100 from the Northern Hemisphere. Among them plants can be found to suit every purpose in any Colorado gardening scheme, from rock gardens to woodlands to dry-land gardens. Individually they may demand attention, yet serious gardeners should investigate this group carefully.

For the major hybrid groups conditions for success are remarkably simple. They prefer a deep, highly organic, well-drained soil with the ability to hold moisture without remaining soggy. During the growing season copious amounts of low-nitrogen fertilizer should be provided. Lilies demand ample sun to persevere, but most hybrids prefer some shelter from our hot afternoon sunshine.

Where can you find lilies for your garden? There are several excellent mail-order firms whose catalogs are shelved in the Helen Fowler Library. Bulbs are offered in the fall and should be planted immediately upon delivery since they have no protective covering like bulbs of fall-planted spring flowers. As with many plants, their prices may seem formidable, but a group of three bulbs purchased this year will soon multiply into a magnificent display, filling those summer gaps in your garden with unequaled color, fragrance and dramatic focus.

Larry Latta
Botanist-Horticulturist
at Denver Botanic Gardens

Lilium
henryi

AUG

Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

African Violet Society, 4th Thurs. of 7 months; Bonsai Society, 1st & 3rd Tues.; Cactus & Succulent Society, 2nd Tues.; Civic Garden Club, 1st Fri.; Colorado Native Plant Society, 4th Wed.; Gloxinia Gesneriad Growers, 1st Sat.; Hemerocallis Society, 3rd Sun. of 4 months; Ikebana International, 4th Fri.; Iris Society, spring & fall dates; Men's Garden Club, 4th Thurs.; Mycological Society, 2nd Mon.; Orchid Society, 1st Tues.; Rock Garden Society, 3rd Wed.; Rose Society, 2nd Thurs.; Ultra Violet Club, 4th Mon.; Water Garden Society, 2nd Sun. of 5 months

C	A	L	E	N	D	A	R
	S	M	T	W	T	F	S
		4	5	6	7	1 Asian Festival of Arts and Culture	2
					Boulder Bassoon Band August 7-10 "Glass at the Gardens"	8 Boulder Bassoon Band	9 Gentian Foray at South Park, Tea Ceremony
10	11	12 Dry It. You'll Like It, Perennial Garden Walk	13 Watercolor and Mixed Media Painting	14	15	16 Watercolor and Mixed Media Painting	
17 Mushroom Fair, Tea Ceremony, Mountain Grasses	18	19	20 August 20-24 Denver Artists Guild Show and Sale	21 Dizzy Gillespie and the Garden All-Stars	22 Dizzy Gillespie and the Garden All-Stars	23 Tea Ceremony	
24	25 Identifying Plant Parts	26	27	28	29	30	
31 Rose Society Show, Tea Ceremony	Coming Next Month September 2 Perennial Garden Walk September 4 or 5 Cleo Parker Robinson Dance Ensemble			September 5-6 Members' Plant Giveaway	September 7 Tea Ceremony September 13 Tea Ceremony	September 16 Deciduous Shade and Ornamental Trees for Denver September 17 Free Day for Denver City/County Residents September 21 Tea Ceremony	September 27 Tea Ceremony September 27-28 Denver Orchid Society Show

Denver Botanic Gardens, Inc.
909 York Street
Denver, Colorado 80206
303-575-3751

August 1986

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NEW S



Noted Biologist Alvaro Ugalde to Present "Paradise Preserved: Costa Rica" on Wednesday, September 10

On Wednesday, September 10, DBG members and their guests will have an unusual opportunity to hear an outstanding authority describe the incredible biological richness of Costa Rica and the current efforts underway to preserve it forever. Alvaro Ugalde, executive director of the National Parks Foundation of Costa Rica and director of its National Park service, will present an illustrated natural history program, "Paradise Preserved: Costa Rica," at 7:30 p.m. in John C. Mitchell II Hall. Admission, payable at the door, is \$2.50 for members and \$3 for non-members.

Costa Rica, with coastlines on both the Atlantic and the Pacific Oceans, is a land bridge that connects the Americas. For many years, biologists studying tropical forests and wildlife have considered it a natural laboratory; it has served as a training ground for many prominent American tropical biologists. For its size (and it is no larger than West Virginia), the country has more species than any other terrestrial habitat in the world!

Its tremendously rich flora and fauna includes 850 bird species (more than in all of the United States and Canada combined), 200 species of mammals, 150 of amphibians, 210 of reptiles, approximately 1,000 of butterflies (10 percent of the world's known butterflies) and 8,000 species of higher plants of which 2,500 are large and medium-sized trees and 1,200 are orchids.

continued on page 4

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Fig. 149. *Bletia purpurea*

*Peg Hayward
(center)
instructs
volunteer
guides in the
Conservatory.*



New Training Program for Conservatory Guides

In 1985 several thousand adults and school-age children were led through Denver Botanic Gardens by DBG's elite core of volunteer guides. These guides share valuable and interesting information about many of the unusual plants growing in the Conservatory. The knowledge these volunteers impart is gained from attending a series of classes offered at the Gardens. Participants receive an orientation to the gardens and library, as well as an introduction to basic botany. Through this ten-week program they learn about our plants and how to comfortably lead educational tours.

Classes meet on Tuesdays starting September 30 and run through December 2, from 9:30 to 11:30 a.m. in Classroom A. Class size is limited so advance registration is necessary.

To register for classes use the Education Department Registration Form in this newsletter. A \$25 fee will be refunded after 40 hours of touring.

Current guides are encouraged to attend one of two classes given by Larry Latta to review changes in Conservatory plantings that have occurred over the past year. The class will be offered twice, first on Wednesday, September 17 at 1 p.m., and again on Tuesday, September 23 at 10 a.m.

Both new and continuing guides are invited to attend the following series of "brown bag lunches" scheduled for noon on Tuesdays in Classroom B (unless noted otherwise). On October 14 a slide show of Japanese Gardens will be presented by Diane Ipsen. "Ground Covers in the Conservatory" is the title of a talk to be given by a greenhouse staff member on November 18. Pat Pachuta will present a slide program on "Cacti and Other Succulents" at the Guides' Tea, to be held at 1 p.m. in DBG's Botanic House on December 9.

The new year will begin with a talk given by Dick Schwendinger on January 13, "Ecosystems in the Conservatory". February 10 is the day set aside to tour the back greenhouses. And on March 10, lunch will be at the Morrison Horticultural Demonstration Center where Judy Carrier will direct you on a tour of the Center and give information on guiding disabled visitors in the Conservatory. The last lunch on April 14 will be an evaluation and suggestion meeting, to conclude the Conservatory Tour Season.

The need for Guided Tours is an ever-increasing demand that we hope you will consider helping us meet.

Tributes

- In honor of Mrs. Bridgett Cosgriff Fisher
Barbara Moore Rumsey
- In honor of Mr. & Mrs. Richard A. Kirk
Barbara Moore Rumsey
- In honor of Mr. & Mrs. James Kurtz
Barbara Moore Rumsey
- In memory of Lee Ashley
Dorothy Howe Dillon
- In memory of James Blue
Mr. & Mrs. John Atkinson
- In memory of Mrs. Almeda Bush
Virginia F. Wagner
- In memory of Mrs. Otilie Fredrich
Karen S. Fredrich
- In memory of Benjamin H. Frey
James & Karen Boss &
Sean C. Pease
- Mr. & Mrs. Kenneth E. Clements
- Mr. & Mrs. Keith C. Frey
- Tom & Shirley Oliver
- Mr. & Mrs. A. A. Quincy, Jr.
- Mr. & Mrs. Donald E. Skotheien
- In memory of Frank King
Mary Adams & Sue Tyson
- In memory of Laura M. Ling
Mr. & Mrs. M. J. Oldaker
- In memory of Minnie Mills
Mrs. F. V. Altvater
- In memory of Cora Wingren Soll
Margaret Smith
- In memory of Mrs. William (Grace E.) Wierman
Mrs. Susan Eisenthal
- Mrs. Jane Mitchell
- Judith Y. Nichols
- Mr. & Mrs. Andrew Pfeiffenberger
- Dorothy Thomas Phelps
- Mr. & Mrs. James Rheem
- In memory of Robert Wilson
Ruth E. Wilson

Green Thumb News Number 86—9 September 1986

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than August 20 for October, September 19 for November and October 20 for December.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.



Accredited by the
American Association
of Museums

Helen Fowler Library
Volume 9, No. 4
September 1986

Librarian:
Solange Gignac

Sweet Herbs and Sundry Flowers

By Tania Bayard. The Metropolitan Museum of Art, New York, 1985. \$12.95. SB 466 U6 B39 1985.

Parsley, sage, rosemary and thyme . . . or maybe, oxlip, woad, stavesacre and myrrh. Anyone who has visited The Cloisters in New York, or has an interest in medieval gardens, will appreciate this charming description of the plants and traditional gardening methods used there.

Tania Bayard, assistant horticulturist for The Cloisters, begins with short, informal chapters on gardening and the uses of herbs during the Middle Ages. These draw on manuscripts and paintings to recreate the essence of what gardening was like then. The rest of the book is devoted to descriptions, diagrams and plant lists for each of The Cloisters' gardens.

The species listed are especially important because they have been grown at The Cloisters; and their leaves, flowers and fruits have been compared with medieval plant descriptions to determine which varieties were grown during the Middle Ages. For instance, the clove-pink carnation (*Dianthus caryophyllus*) was compared with carnations in the Unicorn tapestries and found not to be the flower shown. The search for that flower had to begin again.

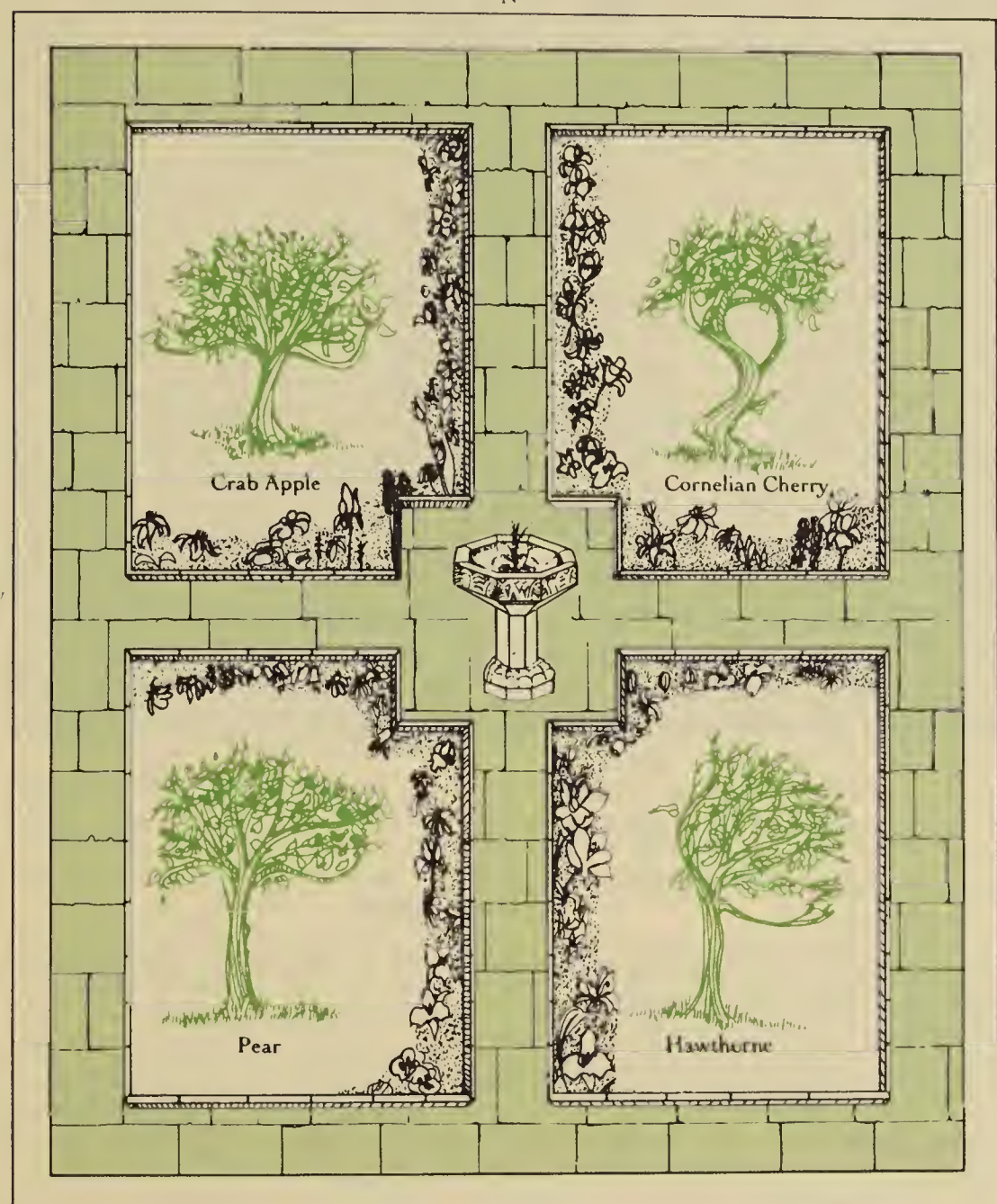


DIAGRAM OF THE CUXA CLOISTER GARTH GARDEN

The Garth and Herb Gardens are modeled after historical gardens of the Middle Ages. The Trie Cloister Garden, on the other hand, is composed of plants shown in the seven Unicorn Tapestries. Parts of the layout resemble parts of the individual tapestries. The biggest difference is that in the tapestries the spring, summer and fall flowers are all blooming together.

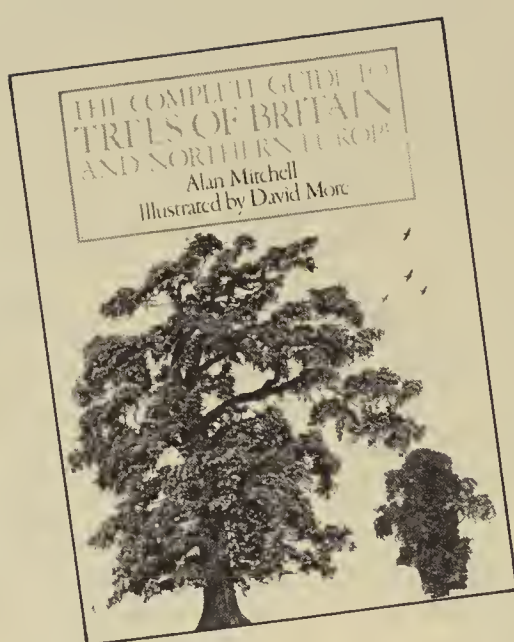
Richly illustrated with medieval woodcuts, and a detail from the Unicorn Tapestries on the cover, this small volume will fill the reader with nostalgia for the Middle Ages. One can only wish that Bayard had shared the seed sources with the reader.

Kathy Johnson

THE REVIEWERS

Kathy Johnson—
assistant
librarian

Gayle Weinstein—
DBG Botanist-
Horticulturist



The Complete Guide to Trees of Britain and Northern Europe

By Alan Mitchell. Dragon's World Ltd., Limpsfield, Surrey, Great Britain, 1985. \$27.95 QK 281 M58 1985.

This is an excellent reference book on trees. The author writes about the wide variety of plants which came from temperate climates of the world and are now growing in Britain and northern Europe. Not only does he discuss the individual plant, but he also makes comparisons to similar species and genera. For example, he describes poplars and cottonwoods, explaining the difference between them and the groups to which they belong. He includes information on their history, where they have been cultivated and different selections available.

Along with an interesting text are detailed illustrations drawn by tree artist, David More. They depict individual detail as well as overall form. At the end of the book is a practical reference section on planting, pruning and selecting trees for landscape.

In a very creative way, the author is able to discuss 500 species and 250 varieties. For those who enjoy reading about trees, this book is a valuable addition to the library.

Gayle Weinstein

The Bulb Book: A Photographic Guide to Over 800 Hardy Bulbs

By Martyn Rix and Roger Phillips. Pan Books Ltd., London, 1981. \$16.45. SB 425 R59

A sumptuous feast for the eye and valuable resource for the serious bulb gardener and collector, *The Bulb Book* features studio color photographs of the entire plant for most of the 800 species covered. Listed in order of bloom time, the plants are artistically arranged in groups on a light background. An extra blossom with a few petals removed to show a cross section is sometimes added for precise identification. The placement of the plants and resulting effect are striking. Most of the remaining plates show the plants growing in their native habitat. These include some lovely views of the general terrain.

Rix and Phillips include as many species as possible from the same genus. Ninety-four species of crocus are shown, plus 15 named cultivars. The text describes where these originated, what terrain they can be found growing in the wild and at what altitude. Size, flowering time, distinguishing characteristics, alternate names and cultural requirements are also provided.

The authors have thoughtfully provided details for those who wish to specialize in growing bulbs and for those who would rather search for their bulbs in native habitats. Because this book was published in Great Britain, the suppliers and nurseries, as well as the societies where some of the rarer plants can be obtained, are also British. Only plants that are hardy in the east of England and northwest Europe are included.

Brief sections on cultivation, propagation, pests and diseases offer some good advice. "Conservation and Collecting" reminds the potential collector of the human threat to rare species. Plants from this category are noted in the index.

Photographer Roger Phillips and Dr. Martyn Rix, recently botanist to the Royal Horticultural Society, have collaborated to provide a good visual reference to bulbs, corms, tubers, rhizomes and their flowers.

Kathy Johnson



Miniature Preserved Flower Arrangements

By Maureen Foster. William Collins Sons & Co., Ltd., London, 1985. \$11.95. SB 449.3 D7 F6Mi 1985.

Maureen Foster never felt that she gave enough space to miniature arrangements in her previous book, *The Art of Preserved Flower Arrangement*. This new 61-page volume fills that gap with imaginative, novel ideas for tiny preserved floral arrangements. She covers selecting and preserving plant materials, designing arrangements, constructing plaques, pictures and other tiny flower-decked miniatures.

In some of the 34 color plates, little cupids, horses and other animals occupy tiny environments amid dainty bits of flowers. A section on Victoriana presents instructions for a charming little fan and parasol trimmed with lace and tiny nosegays. Included in the chapter on the basics of preserving plants are two color plates showing color ranges of plant parts used, along with their common and Latin names. Foster is very inventive in her use of materials commonly found around the house, and in her adaptation of plant materials by making miniatures from parts of compound leaves and flowers.

Kathy Johnson

Eine Freundliche Einladung

A Friendly Invitation

Der Denver Botanische Garten wunche zum der Oktoberfest aller und jeder einladen. Beitreten uns fur eine festliche nacht mit Deutches essen und tanzen. (Translation: Denver Botanic Gardens wishes to invite each and everyone to the Oktoberfest. Please join us for a festive evening of German food and dance.)

On Saturday, October 25, "Oktoberfest at the Gardens" will begin at 6:30 p.m. in John C. Mitchell II Hall. Expect to find German food, beer, wine, dancing and music by accordionist Dieter Baumn. The Denver Kickers Schuhplattlers (dressed in authentic *lederhosen*) will provide the night's entertainment. The evening will also include a silent auction of garden-related items.

Dress is either German or casual attire for this autumn party. Tickets are \$75 per person and are available from Mrs. Don Falk, 727-5972. Oktoberfest benefits on-going programs at your Gardens.

Great Getaways Preview—Southeast Asia and the World Orchid Conference, March 1987

You are invited to a preview evening on this marvelous region on Thursday, October 2 at 7:30 p.m. in Botanic Gardens House. A slide show of this fascinating area will be presented by Mr. Tom Keesling, Travel Associates, Inc., and DBG Executive Director Mr. Merle Moore, a leader on the tour.

Some have already signed up for this extremely fascinating and well-planned visit to "Orchid Isles and Asian Gardens." The evening's presentation, followed by refreshments, is open to anyone interested in the area. Because both speakers have traveled extensively in Southeast Asia, an exciting travelogue is promised.

Bangkok, Thailand, Singapore, Kota Kinabalu and Hong Kong are among the incredible places to be visited and you can still conclude your trip in Tokyo for the 12th World Orchid Conference.

More information can be obtained by contacting Travel Associates, Inc., 759-8666, or 7007 East Hampden Avenue, Denver, CO 80224.



Great Getaways: Future Trips

It's not premature to mention, or even plan for, future trips to Asia or Spain and the Pyrenees in 1987.

In early March members can travel to the Orchid Isles in conjunction with the 12th World Orchid Conference in Tokyo on March 16, 1987.

A three-week adventure in the Pyrenees of northern Spain and southern France is being planned to observe the region's incredible flora and artistic beauty.

Later outings will lead DBG members to the Galapagos Islands, Lapland and, it is hoped, to China. These trips never fail to provide a diverse and memorable experiences. Call Andrew Pierce, Assistant Director at DBG, 575-3751, for additional information on these and other Great Getaways.

Exclusively for Members — Annual Plant Giveaway

On Friday, September 5, from 8 a.m. until 4 p.m. and Saturday, September 6, from 9 a.m. until noon, we are again offering a selection — an intriguing selection — of plants for members to choose from. A detailed list was provided in your August newsletter, but expect to find some choice rock alpine plants, unusual houseplants and special orchids. Remember, too, that it is first-come, first-served throughout the two-day giveaway.

Please bring your current newsletter, along with your membership card, to make your selections. Care sheets on the plants will be provided.

"Orchids on Broadway" September 27-28

Are you interested in learning about, and possibly growing, some of the world's most beautiful and exotic flowering plants? If so, plan to attend the Denver Orchid Society's annual Show and Sale at Denver Botanic Gardens during the weekend of September 27 and 28. The show, open to the public, will begin in John C. Mitchell II Hall on Saturday at 10 a.m. until 5 p.m. and will resume on Sunday at 10 a.m. until closing at 4 p.m.

Orchid exhibitions depicting the theme of "Orchids on Broadway" will be judged starting at 7 p.m., Friday, September 26. Entries for the competition will be received at the Hall from 10 a.m. to 6 p.m. on Friday, September 26. Additional information on registration for the show can be obtained from Dick Zemen at 421-6291.

For those who are less knowledgeable about orchids, the society is providing educational displays and members to answer questions concerning orchid culture and management. Sale tables

offering a diverse assortment of orchids will also be set up. The show is open to anyone who wishes to view the colorful arrangements of orchids at no additional charge apart from the non-member gate admission fee. All interested visitors should take advantage of this opportunity to discover the allure of this incredible group of plants.

Harvest Decorations Sought

To assist the Gardens with the planned Oktoberfest, the Oktoberfest Committee is asking for dried materials to use as decorations for the dinner dance.

If you have bushel baskets or any dried materials such as yarrow, poppy seed pods, baby's breath, grapevines, corn stalks, straw flowers, Indian corn, cattails, chrysanthemum plants, pumpkins or gourds, please contact Debbie Locke at 793-1467 or Susan Flanagan at 762-0772.

Discover Potpourri

Potpourri is "a mixture of dried flower petals kept in a jar and used to perfume a room" as defined by *Funk and Wagnalls*. This definition is far too simplistic when applied to the uses of DBG's potpourri. Flower petals are combined in a variety of mixtures providing many different fragrances and are then prepared in sachets, pillows and jars to perfume rooms, closets, drawers and much more.

Avalonne Kosanke and a team of enthusiastic volunteers meet the third Friday of each month from

9:30 a.m. until 2 p.m. to package these herbs. This involves mixing the petals and herbs, sewing the containers or bottling the herb salts as well as creating new uses.

These items are sold through the Gift Shop and at the Annual Holiday sale to generate funds for the benefit of Denver Botanic Gardens. If you enjoy working with your hands and would like to meet others with similar interests while helping the Gardens, call Mrs. Kosanke at 238-2998 and plan to meet with them in Classroom B. Bring a sack lunch and friends are welcome.

*Crafted by our
potpourri
volunteers*



"Paradise Preserved:"

continued from page 1

But by the 1960s, almost 50 percent of the natural Costa Rican forests had been destroyed by logging and agricultural development. There were fewer and fewer forests, less water and animals and during the dry months, more and more fires. Realizing the incredible wealth contained within their forests, Costa Rican citizens began a national park system, only 14 years ago, that has since become the backbone of their conservation movement. Conservationist Alvaro Ugalde began his formal commitment to the national park system when, at the age of 22, he came to the United States for a month-long international training course in national park management. Ugalde and other dedicated conservationists were able to have two national parks established by law and another four by presidential decree; that system has now grown to a national network of parks, wildlife refuges, national monuments, archaeological sites and forest reserves. Encompassing almost three million acres, it totals some 25 percent of the country. National parks and biological reserves alone now cover 8 percent of the Costa Rican landscape.

With another prominent leader in the conservation field, Mario Boza, Alvaro Ugalde created the National Parks Foundation in 1978 in response to increased economic pressures to seek non-government support. Using "seed money" from World Wildlife Fund-U.S. and The Nature Conservancy, the Foundation seeks to develop and carry out a program to protect Costa Rica's biological diversity through an integrated system of natural areas, parks, refuges and biological reserves.

Under the massive conservation awareness movement of which Mr. Ugalde was instrumental, Costa Rican citizens are now quick to protest any harm to the forests, wetlands or other habitats in an ongoing battle to avert commercial and agricultural development. The Costa Rican National Park system, a model for all developing countries, provides some hope that these marvelously diverse tropical communities will be preserved for future generations to study and enjoy. Join others interested in these current critical issues and enjoy an informative program on the remarkable natural history of Costa Rica. Alvaro Ugalde is certain to provide an inspiring introduction to his homeland. Tickets to "Paradise Preserved: Costa Rica" may be purchased at the door.

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Gardening Tips for September

Successful planting and transplanting can take place in the fall in our region if thought is given to timing and the requirements of the plant involved.

First, we must remember that these plantings must be carried out early enough to allow the plant sufficient time to establish itself before the onset of winter. In Colorado this date can vary considerably from season to season. We often have root growth continuing through the end of October and occasionally into November.

Second, as in the spring, proper soil preparation is essential so new roots can easily penetrate the surrounding soil for rapid establishment.

Finally, as always, correct watering procedures must be provided so the plant, be it a tree, shrub or perennial, has sufficient but not excessive amounts of water available.

Because temperatures in our area can drop to minus 20 degrees during winter, I will be the first to acknowledge that spring planting is preferred for the majority of plants. Circumstances may, however, dictate having to deal with fall plantings or transplantings. Winter temperature changes cause freezing and thawing and it tends to "heave" newly planted material from the soil. Careful checking must be done to see that your plants stay secure in their planting holes. Generally, when the temperature begins to drop in the middle of September, you have six weeks for roots to establish before normal winter conditions dominate and this is usually sufficient.

When transplanting trees and shrubs at this time of the year, be sure to move the plant with the maximum size root ball that is practical. This may mean using mechanical equipment for larger specimens.

Planting hole preparation must be thorough for our clay soils and it should start off one to two feet larger than the size of the ball being inserted. Dig your hole the day before transplanting and break up the base of the area. Fill it with water and let set overnight; if it drains away by morning — fine. But if not, you should dig farther adding gravel and coarse organic matter so that after planting your specimen will never sit in water. Perhaps the motto is "Use a \$5 hole for a \$1 plant." Add decomposed organic matter such as compost, peat moss or well-rotted manure to the fill soil at the rate of two parts organic matter to three parts soil. You will have an excess of material which can be used for top-dressing low spots in the lawn or other parts of the garden.

When transplanting be sure to water the plant thoroughly the day before lifting to insure moving a complete ball of soil and roots. Ideally, your plant should not wilt after planting. Place the ball on a fairly solid base in the hole so that it does not sink at a later time. Carefully place it so that it sets level or slightly higher (one to two inches) to the surrounding soil when planting is complete. Back fill with your soil mix and water adequately to fill space around the plant while closing up the hole. If sufficient water is used as a settling medium, firming will be complete. Your plant should not move or rock after planting, but don't overdo it by squeezing all the air out of the soil. Such compaction prevents the essential oxygen and water from getting to the roots where they are needed for growth.

Finish the process by creating a depression around the plant on the soil surface to contain future waterings. Some superphosphate or low nitrogen fertilizer can be added to the fill mixture, but never overdo it. You can always add fertilizer during the following season with the use of a deep watering probe.

Subsequent waterings may be required every seven to ten days, depending on weather, and ideally the plant should be moist but not saturated when winter starts. During the following year (including winter), careful watering will be necessary as it takes a tree or shrub several seasons to become established.

Like trees and shrubs, most perennial lifting and transplanting is done in the spring, but a few exceptions prefer fall planting. They are spring flowering plants like peony, poppy, leopard's-bane and creeping phlox. Early September is preferred to move these plants so they can establish roots prior to winter. Dig and prepare your garden using one part compost and two parts of soil. Peonies need this special treatment since they are left in the same position for years. Check during the winter to see that your plants have not been "heaved" out of the ground.

Do not be afraid of fall planting, but remember to do it carefully and early enough to allow for root establishment so necessary for winter survival.

Andrew Pierce
Assistant Director at
Denver Botanic Gardens



In the Peony Garden

CSEP

Regular Meetings of Plant Societies
A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

African Violet Society, 4th Thurs. of 7 months; Bonsai Society, 1st & 3rd Tues.; Cactus & Succulent Society, 2nd Tues.; Civic Garden Club, 1st Fri.; Colorado Native Plant Society, 4th Wed.; Gloxinia Gesneriad Growers, 1st Sat.; Hemerocallis Society, 3rd Sun. of 4 months; Ikebana International, 4th Fri.; Iris Society, spring & fall dates; Men's Garden Club, 4th Thurs.; Mycological Society, 2nd Mon.; Orchid Society, 1st Tues.; Rock Garden Society, 3rd Wed.; Rose Society, 2nd Thurs.; Ultra Violet Club, 4th Mon.; Water Garden Society, 2nd Sun. of 5 months

C	A	L	E	N	D	A	R
	S	M	T	W	T	F	S
		1	2 Perennial Garden Walk	3	4 Cleo Parker Robinson Dance Ensemble	5 Members' Plant Giveaway, Cleo Parker Robinson Dance Ensemble	6 Members' Plant Giveaway
	7 Japanese Tea Ceremony	8	9	10	11	12	13 Japanese Tea Ceremony
	14	15	16 Deciduous Shade and Ornamental Trees for Denver	17 Free Day, Ikenobo Workshop	18	19	20
	21 Japanese Tea Ceremony	22	23	24	25 Drawing from Nature	26 Cherokee Gathering Basket	27 Orchid Show, Basketry, Tea Ceremony, Bulbs, Sketching
	28 Denver Orchid Society Show	29 Beginning Botanical Illustration	30 Botanical Illustration: Harvest Time				
	Coming Next Month		October 5 Aspen Ecology and Fall Edible Plants October 6 Appalachian Basketry Techniques	October 8 Natural Materials Basketry, Plants and Little People	October 11 Know and Grow Orchids, Grass Identification	October 13 Discover the Pawnee National Grasslands	October 25 "Oktoberfest at the Gardens"

Denver Botanic Gardens, Inc.
 909 York Street
 Denver, Colorado 80206
 303-575-3751

September 1986

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Denver Botanic Gardens

October 1986

Number 86-10



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"Botanical Treasures: A Show and Sale of Illustrations from 1600 to the Present"

Denver Botanic Gardens and Turner Art Gallery, Cherry Creek, will fill John C. Mitchell II Hall with hundreds of antique and contemporary botanical prints from Friday, November 7 through Sunday, November 9. "Botanical Treasures: A Show and Sale of Illustrations from 1600 to the Present" will describe the history and development of the art of botanical illustration with lovely examples that will include some very rare and unusual prints. And except for a few pieces loaned specifically for this exhibit, the remainder will be for sale!

The Turner Art Gallery is the oldest art gallery in Colorado, having dealt in antique botanical prints since 1929. Prints will be available either beautifully matted and framed in a range of styles from burl wood to gilded or simply matted and shrink-wrapped. Prices will range from the inexpensive (less than \$25) to the extravagant (into the thousands).

The earliest plant drawings were highly naturalistic to assist the collectors of herbs. Through centuries of copying, however, botanical illustrations became increasingly inaccurate; they were drawn from older designs rather than direct observation.

The Renaissance brought new interest in nature and good plant illustrations again became available as interest in medicinal plants was revived.

The exploratory voyages of the 16th century stimulated botanical illustration tremendously since the most talented botanical artists were
continued on page 5



Dr. Beatrice Willard Featured at the Eighth Annual Carl Tempel Wildflower Lecture

Dr. Beatrice Willard, internationally known alpine ecologist from Boulder, will present the Eighth Annual Carl Tempel Wild-

flower Lecture on Monday, November 3, at 7:30 p.m. in John C. Mitchell II Hall.

Dr. Willard, an amazing woman, has been dedicated to the study of the sensitive alpine communities for the majority of her life. She graduated from Stanford University
continued on page 5

Inside:

Oktoberfest
page 3

*Great
Getaways*
page 4

*Classes for
adults* page 7

*Classes for
kids* page 10

*From the
"Botanical
Treasures"
Show—Guinea
Pepper by Mrs.
Elizabeth
Blackwell,
artist and
engraver of
A Curious
Herbal
(1737-39), a
project
undertaken to
finance her
husband's
release from
debtor's prison.*



African Violet Fall Sale

Visitors to Denver Botanic Gardens on Sunday, October 18, will observe the enthusiastic following the African violets have. The Rocky Mountain African Violet Council's Fall Sale will be held at the Gardens in John C. Mitchell II Hall from 9 a.m. until 4:30 p.m.

African violets come in many colors other than violet; their variety of shades ranges from blues to reds and pinks to whites as well as bicolors.

The Council is a non-profit organization consisting of 16 clubs ranging from Longmont to Colorado Springs. Members of these clubs will provide plants from their own collections for the sale in an attempt to stimulate interest and appreciation of African violets and other gesneriads. They will be on hand to answer questions on pest control, culture and maintenance of these celebrated houseplants.

The non-member gate fee will be in effect, but admission to the sale is free. Plan to be one of the new participants in this rewarding gardening activity and attend the sale.

New Members Mark Your Calendars

Welcome to Denver Botanic Gardens. A special evening has been set aside for our new members to visit the Gardens and to learn more about who we are and how we function. For instance, you can discover that articles for your benefit can be found in the *Green Thumb News*. Circle October 30 on your calendars now and look for details to follow in the mail.

Tributes

- In honor of Mr. & Mrs. Curtis Walden
George & Mary Engelter
- In memory of Lee Ashley
Dorothy Howe Dillon
- In memory of Mrs. Sydney Brock
Mrs. Marjorie Temple
- In memory of Mrs. Almeda Bush
Judy Arledge
- In memory of Mrs. Mabel Henry
Allyne E. Lawless
- In memory of J. Kenneth Malo
Dorothy T. Phelps
- In memory of John M. Pogorelz
Herbert & Bea Jones
- In memory of Richard S. Shannon, Jr.
Mr. & Mrs. Barkley L. Clanahan
- In memory of Ruth Shwayder
George & Mary Engelter

Green Thumb News Number 86—10 October 1986

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than September 19 for November, October 20 for December and November 20 for January.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.



Accredited by the
American Association
of Museums

Associates' Annual Business Meeting and Luncheon

The Associates, an organization of volunteers dedicated to the development of Denver Botanic Gardens, meets once a year specifically to thank their special volunteers and to discuss the year's activities. The 1986 Annual Associates' Business Meeting and Luncheon will be held on Wednesday, October 29, beginning at 10 a.m. in John C. Mitchell II Hall.

Individual endeavors for volunteer service will be acknowledged during the business meeting that begins at 10 a.m. A luncheon (free to Associate members and \$6.50 for their guests) follows at noon.

"Alpine Interlude," an exciting review of the Alpine tour Panayoti Kelaidis recently went on, will be featured after the luncheon.

October is also the time to complete your service record for the past year and to renew your membership with the Associates. If your hours have not been turned in to your chairman by October 1, phone Pat Hoffman, 777-3674, by October 16. Reservations need to be placed through Mrs. Hoffman by October 22.

New Associates and new members of the Gardens are encouraged to call Lucile Downer, 985-8031, for placement in volunteer positions. As of July the following have become new members of the Associates:

Frances Fisher
Mary Ann Harsh
Mary Elizabeth Hurd
Theresa Jones
Linda Kramer
Joan Meredith
Susan Perry
Virginia Raymond
Marjorie Roth
Joy Rowley
Nita Windes

Invitations are in the mail; please be sure to return them in time to assure yourself a place at this year's Associates' Annual Meeting and Luncheon and congratulate your colleagues for their contributions and jobs well done.



Oktoberfest '86

At the Gardens



Oktoberfest at the Gardens

Saturday, October 25th, 6:30 p.m.

John C. Mitchell II Hall

Denver Botanic Gardens

Silent Auction, Festivities,

Food and Entertainment

German or Casual Attire.

Name _____

Address _____

Daytime Phone _____

\$75.00 per person

I am enclosing \$_____ for _____ reservation(s).

I cannot attend but I am sending a donation of \$_____.

Reservations are limited and must be received by October 20.

Your check is your reservation.

Mail your reservations to:

Mrs. Robert Averbach 5335 East Cedar Avenue Denver, Colorado 80222



CHERRY CREEK
NATIONAL BANK



Denver Botanic Gardens

Twenty-one DBG members enjoyed an exciting and educational tour of Italy, Switzerland and Austria in June with the able leadership of Edward Connors and Panayoti Kelaidis. Edward Connors, whose special field is history of art (and a first-class horticulturist by avocation), provided many magnificent glimpses of art, architecture and design of the Medieval and Renaissance periods. Panayoti Kelaidis, our alpine plant specialist, introduced the group to the exquisite wild and cultivated plants of the areas visited.

Arriving at the Milan airport on June 8, the group was met by their trusty, patient Italian operator of the new Mercedes motorcoach which conveyed them and all their luggage through the whole tour. Renato whisked them away to their first of many picnic lunches high above beautiful Lago Orta. What an adventurous beginning!

The Alps of central Europe contained a fascinating blend of nature and the works of man. This trip sampled both worlds, beginning with the magic islands of Lago Maggiore in the Italian lake district. A cruise here carried the participants to extensive formal

gardens, a cavernous baroque palace centuries old and an artful botanic garden, Villa Taranto, with immense collections of rare trees, shrubs and flowers artfully displayed.

The weather at Grindelwald was cool and misty, which did little to prepare participants for the glorious Engadine. Four days were spent in Pontresina, all of which were sunny and perfect for plant hunting. Among the many botanical highlights of this portion were the dazzling profusions of gentians from the lower Alps to the highest peaks. Star gentians, in dark cobalt shades, grew practically everywhere, often mingling with a tapestry of other bright alpine flowers.

This trip of rich contrasts concluded in the Florence and Milan areas where Florence revealed many of its treasures — in churches, chapels, museums, palaces and gardens — a wonderfully rich, many-layered slice of history. Milan, though a busy, bustling city, showed its beautiful reminders of a glorious past. And from each of these cities, trips to surrounding areas took the group to such places as the Leaning Tower of Pisa and the ancient Botanic Garden of Padua. The tour was indeed a feast for mind and spirit.

Great Getaways: Garden Tour of England

Visit England in a very personal way. In May, 1987, the tour committee of Denver Botanic Gardens will sponsor a deluxe, exclusive Garden Tour of England. For two weeks you will stay in historic castles and manor houses that are not open to the public, be introduced to some of England's most famous gardens and visit several smaller, more specialized gardens. Your stay will conclude in London with a visit to the world renowned Chelsea Garden Show.

While staying in the great historic houses, you will be completely free to explore and enjoy their many splendid rooms filled with priceless antiques, paintings by great masters and rare leather-bound books.

This unique tour, which will be limited to only ten discriminating travelers, was planned and will be led by the distinguished British author and explorer Mike Banks and his wife, Patricia. The fine country houses to which they will take you to stay are the private homes of their friends.

The dates for this trip are May 10 to 23. If you are interested and wish more information on arrangements and fares, call Andrew Pierce, Assistant Director at Denver Botanic Gardens, 575-3751.



DBG propagator, Jim Borland, discusses plant material with 1986 interns.



“Botanical Treasures: A Show and Sale of Illustrations from 1600 to the Present”

continued from page 1

employed to travel with the expeditions or were hired afterward to draw the plants from pressed specimens.

The heyday of botanical illustration, however, was the 17th century when artists were hired to record the rare and exotic flowers grown by wealthy gardeners. Scientific botany developed and artists even began to draw floral dissections to assist in plant identification.

Although most of the botanical illustrations done today are for inclusion in floras, there are still some very gifted artists who pursue this field with extraordinary results.

Mark November 7 through 9, from

9 a.m. to 4:45 p.m., on your calendars and plan to come early to choose from the largest selection of botanical illustrations ever assembled in Colorado. Why not bring a guest? Anyone who appreciates gorgeous illustrations—plant lovers, art aficionados, even historians, is certain to enjoy this exhibition.

There is no charge to attend “Botanical Treasures: A Show and Sale of Illustrations from 1600 to the Present” other than the regular non-member gate admission fee. Because of the current popularity and historic importance of botanical prints, this may well be the most exciting show of the art season in Denver.

Dr. Beatrice Willard Featured at the Eighth Annual Carl Tempel Wildflower Lecture

continued from page 1

in biological sciences and has her master's degree and doctorate from the University of Colorado in alpine plant ecology. She has been President of Thorne Ecological Institute in Boulder and a member of the President's Council on Environmental Quality as well as a teacher and park ranger naturalist. For five years she was on staff at Colorado School of Mines and during that time she created the Department of Environmental Sciences. She shared authorship of *Land Above the Trees* with Ann Zwinger. Additionally, other publications to her credit have been *Plant Sociology of Alpine Tundra, Trail Ridge, Rocky Mountain National Park* and *Alpine Wildflowers of the Rocky Mountains*. She has done research with the Institute of Arctic and Alpine Ecology on how people use Rocky Mountain National Park.

No surprise, Dr. Willard's illustrated program will be titled “Alpines from Peak to Sea Level.” In her presentation she will discuss plants growing in Colorado's alpine community that are found in other parts of the world.

The Carl Tempel Wildflower Lecture Series was inaugurated in 1979 to honor the late Major General Carl W. Tempel of Fitzsimons Army Medical Center, who was a great photographer and lover of wildflowers. His wife, Ruth Tempel, is a dedicated and valuable volunteer in our Gift Shop.

Admission to the lecture is without charge and all are encouraged to attend “Alpines from Peak to Sea Level.” The achievements of Dr. Willard and her experiences as an alpine ecologist will prove to be exciting and inspirational.

Be Where the Action Is—Marketing Volunteer Needed

Marketing Department needs a volunteer experienced in planning events. This individual would work with Marketing and Development offices in setting up an exhibit of Micronesian art, tying in tropical fashions and use of the tropical Conservatory for an exhibit in the winter of 1987. We need to start planning now. Please call Diana Hunt, Marketing Communications Coordinator, at 575-3751, with your interest by October 15.

*Also from the
“Botanical
Treasures”
Show—Malabar
Cinnamon by
Mrs. Elizabeth
Blackwell in
A Curious
Herbal*



Plenty of
everlastings at
Holiday Gift
Shop Sale



Herb vinegar
for the Holiday
Gift Shop Sale

Holiday Sale at the Gardens

The Holidays will soon be here and, surprising as this may be, many people are preparing now for this year's gift-giving.

Friday and Saturday, November 21 and 22, are the days for one of Denver's most popular and exotic shopping events. When the doors open at 10 a.m. experienced, eager shoppers will be waiting with lists of ideas for everyone, as they know unique, thoughtful gifts can be found at Denver Botanic Gardens' Annual Holiday Gift Shop Sale.

Treasures will abound. You'll find many unique, hand-crafted items that will make perfect gifts. Original potpourri mixes created at the Gardens will be sold in sachets and handmade "tranquility pillows."

The always popular herb vinegar prepared from herbs harvested at the Gardens, calendars with recipes and gardening tips, or herb packets for salad dressings and dips will make great presents for friends who enjoy gardening or cooking. Other ideas include vine wreaths, stained glass pieces, nature books, silk flower arrangements and imported tree ornaments. The sophisticated adult who "has everything" may delight in some of the one-of-a-kind gifts to be found or the toys that bring back some of the richest memories of childhood.

Admission to the Gardens will be free during both days of the sale and the outside grounds will be open. Watch the November *Green Thumb News* for a more complete listing. Sale hours will be from 10 a.m. until 4:30 p.m. both days.



Books Needed in Library

Volunteers in the Library work all year to prepare donations for the Plant and Used Book Sale on Mothers' Day weekend. These tax-deductible donations are constantly needed and appreciated gifts to the Gardens. Proceeds from the sale of these books at the spring sale help to increase the Library's collection. So, when preparing to come to this year's Gift Shop Holiday Sale, why not gather some books to donate to the Library?



Books for
everyone at the
Holiday Gift
Shop Sale

Aspen Ecology and Fall Edible Plants

Sunday, October 5

(one session: lecture and field trip)
9 a.m. to 3 p.m. Classroom C

This is the time of year to see aspen in their golden colors. The class will begin with an introductory 1½-hour slide program and will be followed by a field trip to identify lower foothills edible plants, particularly berries.

Afterward, students will visit an aspen grove to discuss the general ecology of these majestic trees.

Please bring your lunch, drinking water, rain gear, sunscreen, warm clothing and a camera and binoculars, if you have them.

Meet: in Classroom C and be prepared to carpool.

Instructor: Tina Jones is a wildlife instructor who teaches at the University of Colorado and the Denver Museum of Natural History as well as DBG. She has many years of field experience.

Fee: \$12 members/\$13 non-members

Fall Woody Plant Identification

Saturdays, October 4, 11, 18, 25

(four sessions)
9 a.m. to noon Classroom A

Learn to identify the many beautiful trees and shrubs that are grown in our region and at Denver Botanic Gardens. In this introductory course in plant recognition, students will learn to identify many of the more common genera of evergreen trees and shrubs.

Each class meeting consists of a brief lecture followed by ample field study to provide hands-on experience with the plant material.

Instructor: Gayle Weinstein is a botanist horticulturist at DBG and oversees all aspects of the outdoor plant collections. She has taught horticultural subjects at Ohio State University and the Aurora Public Schools Technical Center.

Fee: \$48 members/\$53 non-members

Limit: 15

Botany for Beginners

Saturdays, October 4, 11, 18, 25

(four sessions)
9:30 to 11:30 a.m. Classroom B

This is a course for those who have no background in botany but wish to know more about plant parts and what they do. This is



fundamental if you wish to know how to identify plants; it will also help you to appreciate what plants require.

Some microscope work as well as greenhouse tours are included.

Instructor: Moras L. Shubert, Ph.D., is Professor Emeritus of Botany at the University of Denver and has over 30 years of teaching experience.

Fee: \$32 members/\$35 non-members

Limit: 15

Discover the Pawnee National Grasslands

Monday, October 13 (Columbus Day)
(one field trip session)
7:30 a.m. to 5 p.m.

Visit the beautiful Pawnee National Grasslands northeast of Greeley and learn about short grass prairie ecology. The heat of the summer has passed and pronghorn antelope are now in rut. Prairie

falcons and golden eagles fly overhead while badgers forage.

Explore the magnificent Pawnee Buttes as described in Michener's *Centennial*. Little bluestem and Indian ricegrass are easily identified by their distinctive seed-heads. Agriculture and the dust bowls will also be discussed.

Please bring your lunch, drinking water, rain gear, sunscreen, warm clothing and a camera and binoculars, if you have them.

Meet: promptly at 7:30 a.m. in the main DBG parking lot. Carpooling will be encouraged.

Instructor: Tina Jones

Fee: \$12 members/\$13 non-members

Limit: 20

CLASSES

Fall
1986
Denver Botanic Gardens



8 Know and Grow Orchids

Saturdays, October 11, 18, 25

(three sessions)

9 to 11 a.m.

Classroom C

Discover the fantastic orchid family and their basic cultural requirements in this three-session course. Following an introduction to the orchids' natural and human history, participants will learn how to develop a good collection for their homes or greenhouses.

Fundamentals of soil media, watering and fertilizer will be covered through lectures and demonstrations. Each student will have the opportunity to take a division home following a hands-on dividing and repotting session.

Instructor: Botanist Horticulturist Larry Latta oversees the DBG greenhouse collections. An orchid hobbyist for 15 years, he has collected in the wilds of Ecuador, Venezuela and eastern Mexico.

Fee: \$24 members/\$26.50 non-members

Limit: 18

Grass Identification

Saturdays, October 11, 18, 25,
November 1, 8, 15

(six sessions)

1 to 3 p.m.

DBG's Kathryn Kalmbach

Herbarium (located upstairs above the library)

The grass family, Poaceae, is one of the largest of all plant families and is of great economic importance to man. Such staples as corn, rice, wheat, barley and oats are all grasses. Over 300 species of grasses are found in Colorado, dominating the vegetation in many areas.



This class is oriented to give those with little or no knowledge of grasses an understanding of grass morphology and the skill to identify grasses using botanical keys and guides. Students will study numerous native and naturalized grasses in Colorado.

Two booklets prepared by the instructor will be used in class: *A Simple Guide to the Common Colorado Grasses* and *Keys to the Grasses of the Colorado Front Range*. These may be purchased in class. Don't forget your hand lens.

Instructor: Janet L. Wingate, M.S. and Ph.D. in botany from the University of Oklahoma, is currently on the DBG staff working in the Kathryn Kalmbach Herbarium. She is an avid field botanist with much teaching experience.

Fee: \$48 members/\$53 non-members

Limit: 14



Pennisetum villosum, a striking ornamental grass

Beginning Calligraphy

(six sessions)

Classroom B

Section I: Wednesdays, October 1, 8, 15, 22, 29,
November 5 from 7 to 9 p.m.

Section II: Thursdays, October 2, 9, 16, 23, 30, November 6 from 1 to 3 p.m.

Please indicate your section on the registration form.

Calligraphy is the art of beautiful writing that has many practical uses such as posters, name tags, labeling botanical illustrations, certificates and addressing envelopes. With a reasonable amount of time and practice, most can develop a creditable hand.

Instructor: Alicia McKim studied art at Western State College and is a freelance calligrapher whose work is exhibited widely. Active in the Colorado Calligraphers Guild, she has taught classes for that group as well as the Lakewood Recreation Center.

Fee: \$48 members/\$53 non-members

Limit: 20

Watercolor and Mixed Media Painting

Section I: Wednesdays, October 29, November 5, 12, (skip November 19), 26, December 3, 10 from 9:30 to 11:30 a.m.

Section II: Saturdays, November 1, 8, 15, (skip November 22), 29, December 6, 13 from 1:30 to 3:30 p.m.

(six sessions) Classroom B

Please indicate your section on the registration form.

Translate your vision of nature into exciting color! Wet-in-wet techniques as well as painting on dry paper will be demonstrated. From quick gestures to slow contemplative studies, students will explore the rich world of nature at Denver Botanic Gardens. Instruction and demonstrations in assorted media, including pastels, will be provided.

Instructor: Oksana Ross, Ph.D., studied at New York University and Columbia University and has 32 years of teaching experience. She was formerly on the faculty of the University of Colorado at Denver, Metropolitan State College and Colorado Women's College.

Fee: \$48 members/\$53 non-members

Limit: 20



Design Your Own Botanical Cards

Tuesdays, November 11, 18,
(three sessions)
9:30 to 11:30 a.m. Classroom B

Have you ever longed to design and send handmade holiday or note cards? This is your chance to get organized and do just that.

In this class, students will draw holiday greens, cones and flowers from the Gardens on your own Christmas cards. Please bring rulers, erasers, practice paper, pens, pencils, watercolors and brushes, colored pencils and/or markers for your prettiest and most personal cards ever. Beginning and advanced students will be provided with a dozen cards and envelopes to illustrate. Instructions will be given to those students who wish to have their designs printed.

Instructor: Angela Overy received her National Diploma of Design from London University, England and designed in London, New York and San Francisco before settling in Denver. Over the years, many DBG students have found a new interest and ability in her lectures and classes.

Fee: \$29 members/\$32 non-members (includes a \$5 materials fee)

Limit: 20



Beginning Wheat Weaving

Thursdays, October 30,
November 6, 13
(three sessions)
7 to 9 p.m. Classroom B

Wheat weaving, also known as corn dolly plaiting or straw decoration work, is a centuries-old craft that is practiced in almost all of the grain-producing countries. In



this series of workshops you will learn how to clean and work with wheat. Various wheat weaving techniques will be taught to complete harvest wreaths, mordifords, Welsh fans, and other unique decorations.

Instructor: Maureen McGowan is a horticultural instructor and consultant who has taught various craft classes, including wheat weaving, at the Chicago Botanic Gardens and DBG.

Fee: \$30 members/\$33 non-members (includes a \$6 materials fee)

Limit: 15

Christmas Ornaments from Straw and Wheat

(one session)
Sunday, November 16
11 a.m. to 4:30 p.m. Classroom B

Come and learn how to make ornaments from straw and wheat, a craft many Scandinavians do each winter for the holiday season. You will make snowflakes, wreaths, horses, angels and various other unusual tree ornaments. The fee includes wheat for the six or seven ornaments that will be made in class as well as some to take home for others.

Please bring a ruler, scissors and a sack lunch to class.

Instructor: Maureen McGowan

Fee: \$25.50 members/\$28 non-members (includes a \$5.50 materials fee)

Limit: 15

Basketry Workshop: Miniature Baskets

(one session)
10 a.m. to 4 p.m. Morrison Center

Section I: Friday, October 31
Section II: Saturday, November 1

Please indicate your section on the registration form.

These are miniatures of the traditional Appalachian egg basket. Their size is appropriate for doll houses and they make wonderful

gifts as well as holiday ornaments.

Participants will make three to five baskets in the 1½-inch range.

Please bring scissors or shears, white glue, an old towel and your lunch.

Instructor: Robin Taylor Daugherty

Fee: \$30 members/\$33 non-members (includes \$6 for materials)

Limit: 10



Basketry Workshop: Twill-lidded Basket

(one session)
9 a.m. to 5 p.m. Morrison Center
Section I: Friday, November 7
Section II: Saturday, November 8

Please indicate your section on the registration form.

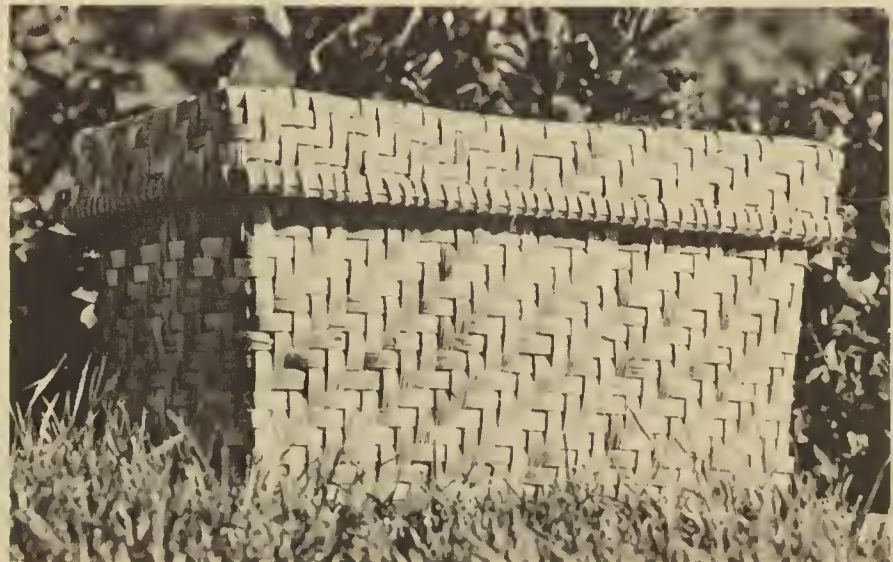
This basket will hold your letters, shoes or gloves in neat order. It can easily be made larger or smaller. The basket itself is woven in a straight twill, while the lid is a point twill creating a diamond shape on top.

Bring a towel, sharp knife or garden shears, awl, clothespins and sack lunch.

Instructor: Robin Taylor Daugherty

Fee: \$30 members/\$33 non-members (includes \$10 for materials)

Limit: 12



9

*Wheat weaving
by Maureen
McGowan*

*Miniature
baskets by
Robin Taylor
Daugherty*

*"Botanical
Illustration"
instructor
Angela Overy*

*Twill-lidded
basket by
Robin Taylor
Daugherty*

Just For Kids

Rainbow Hike

For children of ages 4-6

Saturday, October 4 2 to 3:30 p.m.

(one session)

Classroom B

Fall brings forth the many hidden colors of nature. Take a Rainbow Hike to discover the sights and smells of autumn and unravel the secrets of fall color. Play special games to celebrate our happy harvest and take home a fall color collage.

Instructor: Karen Hostetter studied outdoor education at Earlham College and science education at the University of Texas. Formerly curator of education at the Heard Natural Science Museum and Wildlife Sanctuary in McKinney, Texas, she is an enthusiastic, experienced teacher.

Fee: \$6.50 members/\$7 non-members

Limit: 12

Plants and Little People

For children of ages 2-3 and an adult

Wednesdays, October 8, 15, 22, 29
(four sessions)

2 to 3 p.m.

Classroom B

Two and three year-olds will enjoy exploring the magical world of plants with a parent as they use their five senses and fun activities to discover the plants we eat and wear.

Instructor: Karen Hostetter

Fee: \$24 members/\$26 non-members
(Registration includes one child and one adult.)

Limit: 8 children and 8 adults

*These 1985
"Pumpkin
People"
students
discover
cleaning seeds
from pumpkins.*

Pumpkin Party

(one session)

Classroom B

Section I: For children of ages 4-6
Saturday, October 25
2 to 3:30 p.m.

Section II: For children of ages 5-7
Sunday, October 26
2 to 3:30 p.m.

Please indicate your section on the registration form.

Attention pumpkinheads! Come to our Pumpkin Party and become a Halloween expert. Learn Indian lore and the Irish legend of the Jack-o-lantern. Carve your own creation and sample pumpkin treats.

Instructor: Karen Hostetter

Fee: \$6.50 members/\$7 non-members

Limit: 12



Denver Botanic Gardens
909 York Street
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

Registration Form for Classes and Field Trips

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Address _____

City _____ State _____ Zip _____

Home Tel. No. _____ Business Tel. No. _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No

Gardening Tips for October

Fruits, botanically, are the developed ovaries of female flowers. Some are categorized as fleshy, others are classified as dry. Those most often used as ornamentals are fleshy. They are frequently colorful and add another dimension to a landscape, especially in the fall. Some of the more common plants used for their fruits are cotoneasters, hawthorns and crabapples.

Cotoneaster apiculatus, cranberry cotoneaster, is a small shrub approximately three feet tall. Its most ornamental feature is the cranberry-like fruit that turns red in August and persists for several months. *Cotoneaster multiflorus*, flowering cotoneaster, is a large spreading shrub. In May it produces a spectacular spray of white flowers and many develop into red fruits for an additional show in late summer. *Cotoneaster lucidus*, hedge cotoneaster, (often sold as *C. acutifolius*, Peking cotoneaster) is a medium-sized shrub. In the fall its foliage turns red, yellow and orange and contrasts with its blue-black fruit.

Hawthorns, another large group of plants, are often used for their ornamental fruit. Two trees that do well in the Denver area are *Crataegus ambiguus*, Russian hawthorn, and *Crataegus crus-galli*, cockspur hawthorn. The Russian hawthorn should be widely available, although it is not. A small tree with some apparent drought tolerance, its most striking feature is the small dark, glossy red fruits of early fall that remain for several weeks. Cockspur hawthorn (also a small tree) blooms freely in the spring, fruits easily in the fall, has a horizontal canopy. The fruits are larger than those of the Russian hawthorn and much more persistent.

Crabapples, the third group mentioned, have mostly been hybridized for their flowers. Many have the additional features of small fruits well suited for the fall landscape. *Malus floribunda*, Japanese crabapple, is a small tree with rose-colored buds, pale pink flowers and yellow fruits that are less than three-quarters of an inch in diameter. *Malus x zumi calocarpa*, redbud crabapple, is a small, broad spreading tree with pink buds that change to white flowers when open and are transformed into bright red fruits that last several months. *Malus* 'Liset' has purplish foliage, deep purplish-red flowers and blood-red fruit.

Those plants mentioned above are from commonly recognized groups. The following plants are not as familiar, but have merit for an impressive fall fruiting landscape display.

Ampelopsis brevipedunculata maximowiczii (porcelain vine) is related to grapes and Virginia creeper. The foliage is gracefully lobed and varies from one leaf to the next. Its most outstanding feature is the porcelainlike fruit ranging in color from lavender to shades of blue. Other vines that can be grown for their fruit are clematis, a large family of more than 200 temperate species. Although mostly selected for their flowers, there is a large group of clematis that should also be grown for their ornamental fruits. Clematis fruits are not fleshy, but are classified as dry. Their ornamental features are silky hairs that cover the style of the developing fruit.

Ilex verticillata, common winterberry holly, is a deciduous shrub with outstanding red fruits. Although it prefers moist forests, it appears to be widely adaptable to garden culture. In drier areas it may not reach its mature height of eight feet, but the upright habit prevails and fruit production is heavy. Male and female flowers are on separate plants (dioecious), therefore, both sexes must be planted in order to obtain any fruit.

Another holly that has done well in the Denver area is the blue holly, *Ilex x Meserveae* 'Blue Princess' and 'Blue Prince'. Broadleaf evergreen shrubs with glossy dark green foliage, their fruits begin to turn red in the summer and persist through early spring of the following year. Again, both sexes need to be planted for the fruit as this is another dioecious plant.

Two additional plants that merit attention for fall fruit displays are natives of Colorado. *Fallugia paradoxa*, Apache plume, is a drought tolerant shrub found in southern Colorado. Bearing white flowers in the spring and sporadically throughout the summer, it has a continuous display of plumelike fruit due to persistent silky hairs similar to those on clematis fruit. *Forestiera neomexicana*, New Mexican privet, found in southwestern Colorado, is also a drought tolerant dioecious shrub. The male flowers are numerous and very showy in mass. The female flowers are less conspicuous, but bear attractive privetlike blue fruit.

The above indicates that the fruits of many landscape plants are as attractive as their flowers, and in some cases, more so. Numerous

other plants such as roses, sumacs, barberries and viburnums should be mentioned, but because of space, cannot. The Helen Fowler Library houses a good selection of publications, including catalogues, on these and many other fruiting shrubs that can be used in Colorado landscaping plantings. A bibliography on these publications is available from the librarian.

Gayle Weinstein
Botanist Horticulturist at
Denver Botanic Gardens



*Amelanchier
pumila* by
Emma Ervin

COLORADO

Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

African Violet Society, 4th Thurs. of 7 months; Bonsai Society, 1st & 3rd Tues; Cactus & Succulent Society, 2nd Tues.; Civic Garden Club, 1st Fri.; Colorado Native Plant Society, 4th Wed.; Gloxinia Gesneriad Growers, 1st Sat.; Hemerocallis Society, 3rd Sun. of 4 months; Ikebana International, 4th Fri.; Iris Society, spring & fall dates; Men's Garden Club, 4th Thurs.; Mycological Society, 2nd Mon.; Orchid Society, 1st Tues.; Rock Garden Society, 3rd Wed.; Rose Society, 2nd Thurs.; Ultra Violet Club, 4th Mon.; Water Garden Society, 2nd Sun. of 5 months

C	A	L	E	N	D	A	R
	S	M	T	W	T	F	S
				1 Beginning Calligraphy	2 Beginning Calligraphy	3 Nantucket Basket Workshop	4 Botany for Beginners, Fall Woody Plant ID, Rainbow Hike
	5 Aspen Ecology and Fall Edible Plants	6 Advanced Appalachian Basketry Techniques	7	8 Natural Materials Basketry Techniques, Plants and Little People	9	10	11 Know and Grow Orchids, Grass Identification
	12	13 Discover the Pawnee National Grasslands	14	15	16	17 Free Day for Denver City/County Residents	18 African Violet Sale
	19	20	21	22	23	24	25 "Oktoberfest at the Gardens," Pumpkin Party
	26	27	28	29 Watercolor and Mixed Media Painting; Associates Luncheon	30 New Member Reception	31 Basketry Workshop: Miniature Baskets	

Coming Next Month

November 1
Watercolor and Mixed Media Painting

November 3
Tempel Wildflower Talk

November 7 or 8
Basketry Workshop: Twill-lidded Basket

November 7-9
"Botanical Treasures: A Show and Sale"

November 21-22
Holiday Gift Shop Sale

November 27
Thanksgiving—Gardens open

Denver Botanic Gardens, Inc.
909 York Street
Denver, Colorado 80206
303-575-3751

October 1986

TIME VALUE

Address correction requested



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Permit No. 205
Denver, CO



NEW S

Annual Holiday Gift Shop Sale

Fragrances of frankincense, myrrh, cinnamon and vanilla gently pervade your senses as you enter DBG's magical shopping place. Eight thousand square feet of surprises await holiday shoppers on Friday and Saturday, November 21 and 22, from 10 a.m. to 4:30 p.m.

Denver Botanic Gardens' Annual Holiday Gift Shop Sale amazes even the most jaded shopper. Throughout the year busy behind-the-scenes elves (actually our group of dedicated volunteers) gather and assemble a mammoth selection of collectibles. Their efforts are for the Gardens' benefit, so as you get caught up in the excitement, keep in mind that a gift for family and friends can be a gift to the Gardens.

Enter the front doors and to your left is something not found in department stores. Volunteers from

"Around the Seasons" have amassed a terrific assortment of dried plant materials. From the grasses, seed pods, cones and dried flowers, centerpieces and unique ornaments can be created, while gifts of harvest wreaths will delight your friends.

Now turn around and march through the doors into John C. Mitchell II Hall (the magical shopping place) to discover unusual presents for family, friends and self.

Upon entering this room I'm always torn between going directly to the fantastic selection of books or the delightful display of toys for children and sophisticated adults. Wonderful books on gardening, flower arranging, growing and cooking herbs, and landscaping can be found. Tooley Meads' book, *continued on page 4*



Tempel Wildflower Lecture "Alpines from Peak to Sea Level"

Don't forget that on Monday, November 3, at 7:30 p.m., Dr. Beatrice Willard, well-known alpine ecologist, will present the Eighth Annual Carl Tempel Wildflower Lecture. As detailed in the October *Green Thumb News*, this incredibly enthusiastic scientist will discuss plants growing in Colorado's alpine community that are found growing "from peak to sea level" elsewhere in the world. Her achievements and experiences will provide an inspirational and informative evening. Admission for all is without charge.

Inside:

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page 2

Gift Memberships
page 3

Christmas at the Ice House
page 6

Classes for Adults page 7

DBG Trustee Gloria Falkenberg will help with your book selections.

Volunteer Liz Schermerhorn suggests uses for dried plant materials.

2 | Holiday Happenings at the Gardens

"Heralding the Season," the members' holiday festivity, will be a special opportunity to preview "Blossoms of Light." Members take note and reserve Friday, December 12 from 7-9 p.m., for the annual event in John C. Mitchell II Hall.

The annual "Blossoms of Light" celebration will feature a "Dickens Christmas" including Sunday evening High Teas.

Outside, thousands of tiny lights will be strung on trees, giving the winter Gardens a festive overcoat. Inside, authentic 19th century sleighs will be surrounded by cascades of white poinsettias and a major collection of rare, handmade Simpich character dolls will be on

display and for sale.

"Blossoms of Light" starts December 14 and extends through January 17. The English flavor culminates with High Tea, served from 5 to 8 p.m. on Sundays, December 14 and 21. Appropriate English fare, choir music, a bell chorus and surprises will accompany the freshly brewed Earl Grey or Darjeeling. Sunday High Tea tickets will be available in advance from the Gardens or at the door. Regular non-member admission fees will be in effect.

Ticket information and additional details on these special holiday events will be provided in your December *Green Thumb News*.



Some of the Simpich Character Dolls, "The Carollers."

Jim Sprinkle, the voice of the KCFR/Gardens Concert Series

The Lazy, Hazy Days of Summer

The 1986 summer Gardens Concert Series was a resounding success.

Thanks to the generous underwriting from United Bank of Denver, the sound and logistical talents of the KCFR Radio staff and the beautiful surroundings of Denver Botanic Gardens—kept immaculate by our staff as well as the participants—more than 33,000 people came through our gates between June 26 and September 5 to enjoy evening concerts. The laser show accompanying the Colorado Philharmonic, Dizzy Gillespie and extravagant picnics were the summer's highlights.

Look for more music and surprises in next summer's KCFR/Botanic Gardens Concert Series.



Date Change for "Heralding the Season"

Our traditional holiday event for members, "Heralding the Season," will be held on Friday, December 12 from 7 to 9 p.m. This is an opportunity for members to enjoy coffee, cookies and seasonal music while previewing the "Blossoms of Light" celebration.

Charitable Giving in 1986

1986 is the year to give gifts of appreciated property, stocks and bonds! Such gifts to the Gardens, earmarked for endowment, may be matched 50¢ on the \$1.00 by the Boettcher Foundation Endowment Challenge.

The new tax law will impact taxes on capital gains. Now is the time to consider your year end giving. Consult your accountant and lawyer.

Contact the Development Office at 355-3456 for further information.

Tributes

In memory of Mrs. Charles Bopp
Dr. & Mrs. Jack Stoffel

In memory of James C. Thornton
Harveyette Harvesters Garden Club

In memory of Bertha van Beusekom-Lankhorst
Mr. & Mrs. James Carleton

Green Thumb News Number 86—11 November 1986

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than October 20 for December, November 20 for January and December 19 for February.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.



Accredited by the
American Association
of Museums

"Botanical Treasures: A Show and Sale" November 7-9

Antique and contemporary botanical prints have become extremely popular recently as a result of their historic importance, and their elegant simplicity. Turner Art Gallery in Cherry Creek has an excellent selection of botanical illustrations and from Friday, November 7 through Sunday, November 9, they will join Denver Botanic Gardens to provide an extraordinary show and sale in John C. Mitchell II Hall.

Hundreds of beautifully matted and framed or matted and shrink-wrapped prints will be available at the Gardens for three days in November from 9 a.m. to 5 p.m. This event, "Botanical Treasures: A Show and Sale of Illustrations from 1600 to the Present" is aptly titled. Many fine pieces from the 16th and 17th centuries will be available, although for the best selections, plan to arrive early.

Beautifully illustrated prints of all kinds of flowers, orchids, mushrooms, cacti and fruits will make special holiday gifts this year. There is no charge to attend other than the regular non-member gate admission fee. Prices will range from the inexpensive (\$25) to the extravagant (into the thousands). Art aficionados, plant lovers and historians are certain to enjoy a gift from this exhibition as well as a visit to the show. Remember too, that a gift from the Gardens is also a gift to the Gardens!



Flos Samierii purpureus *Flos Armerius albus* *Flos Armerius ruber*

From the
"Botanical
Treasures
Show and
Sale" by Basil
Besler, circa
1613

Give A Special Gift! A Denver Botanic Gardens Membership

Give a year of enjoyment to friends and loved ones on your holiday list.

A Denver Botanic Gardens' membership is one gift that keeps giving—all year.

A monthly newsletter with lists of plant-related classes, a quarterly magazine containing botanical and horticultural information; a library chock-full of horticultural books, magazines, and more; and special events for all members throughout the year are just a few of the benefits your gift will include.

Remember your friends and loved ones in this special way and they will cherish your generosity all year long.

Student (full-time)	\$18	Family/Dual	\$35
Senior (65 or over)	\$18	Contributing	\$50
Senior Couple (two seniors living at same address)	\$25	Supporting	\$100
Individual	\$25	Advocate	\$300
		Patron	\$500
		Benefactor	\$1,000

Donor's Name _____

Address _____

City _____ State _____ Zip _____

Phone _____

Recipient's Name _____

Address _____

City _____ State _____ Zip _____

Date to Mail Gift Card _____

Gift Card to be Signed _____

Recipients receive a card informing them of your gift, plus a free plant that may be picked up at the Gardens.

Please send to Denver Botanic Gardens, 909 York Street, Denver, CO 80206

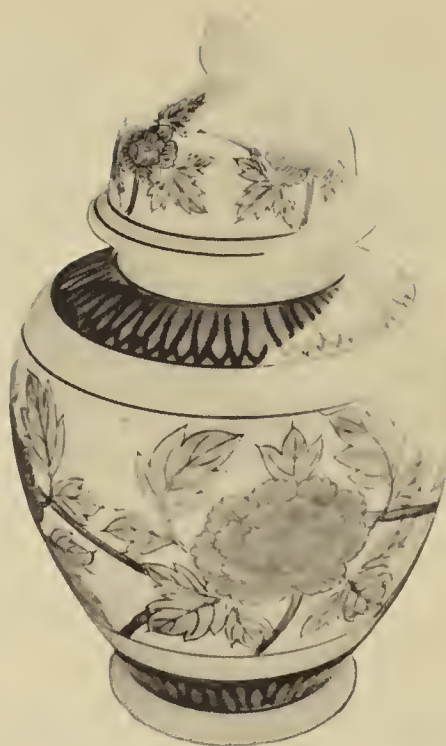
4 Annual Holiday Gift Shop Sale

continued from page 1

For the Herb
Enthusiast



Handmade
Ornaments
from Previous
DBG
Christmas Trees



For Your
Jelly Beans



Herbs, and matching calendar are musts. Basketry students will love *Traditional Scottish Dyes* by Jean Fraser. An autographed copy of *Waterlilies* by Philip Swindell is an excellent idea for friends interested in aquatic gardening. Of course, the Gardens' *Rocky Mountain Alpines* will be available. Gardeners will enjoy the set of Taylors' Guides.

Not all books are for adults. Children adore our Tasha Tudor and Ruth Heller books. I've discovered the delightful "Mousekin" books and older children will appreciate the book, *But Will It Bite?*

My next obsession is the children's corner—for several reasons. Many enchanting toys can be found there, some that will occupy a child's imagination for hours possibly long enough to wrap and hide some of the other presents found today. Included here are old-fashioned treasures that go whirr and pop, that grow and entertain.

Many Ikebana and decorator items have found their way to DBG from the Orient. A prize this year is an amazingly simple iron tea pot from China that resembles "hobnail" glass. An impressive collection of Ikebana vases, supplies and books always pleases the enthusiasts. Hand-painted vases and jars and delicate porcelain vases and figurines from China make special presents for special people.

Your ear does not deceive you. The sound above the buzz of shoppers is the twinkling of wind



For
Grandmothers
or Aunts

chimes mixed with melodies from music boxes. Fine-tuned Woodstock wind chimes will be accompanied by crystal wind chimes decorated with hand-painted flowers. Beatrix Potter's Peter Rabbit sings *It's a Small World* while the "Lasercraft" music box sings of *Yesterday*. Something for everyone!

Amber jewelry with botanical inclusions is a favorite. This collection of jewelry cannot be outdone. Take time to inspect the details in the Venetian glass beads, the semiprecious stones and the cloisonne. Long strands, chokers, earrings, bracelets and brooches are traditional but much appreciated gifts.

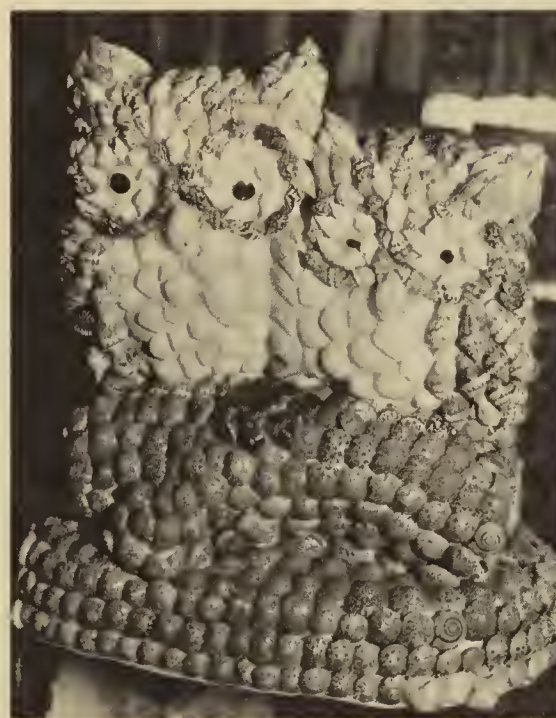
Ambience on these days is provided partially by the shoppers and sounds, but primarily by the fragrances created by the dedicated, talented volunteers of the Potpourri Workshop. Their motto is to "put a little spice in your life." They suggest making your own potpourri and they have all the necessary supplies. They have blenders, subtle, provocative undertones that enrich and enhance and fragrances include angelica, chamomile, cinnamon, lemon grass, orange flowers, tonka beans and wintergreen. For mixing your own they offer fixatives, oils and even petals.

These volunteers have also created enticing packages and stitched dainty sachets and tranquility pillows. They continue to amaze the "all-thumbs" shoppers with their delicate needlework. They have also conjured up an incredible dill dip and a delectable herb salt.

Other herbal treats will be provided by the DBG Guild members who once again treat shoppers to their luscious mixed herb or tarragon vinegars. These herbs are fresh from our own Herb Garden. Always full of imagination,



For the
Hostess, a Cast
Iron Teapot



For an Exotic
Arrangement

A One-of-a-
Kind Gift

Guild members annually provide surprises.

Editor's Guide to shopping this sale: Every inch of the hall provides exciting treasures. Take time to look through everything, walk away and return. Even our experienced shoppers can uncover some surprises. You may find a brass rocking horse, a set of napkin rings decorated with green metal leaves and cherries or an Ian McGregor farmhouse in the English cottage style. There is no charge to enter the Gardens to shop Friday and Saturday, November 21 and 22, and the outside grounds will be open. But hurry on in to let the shopping fun begin and bring your biggest shopping bag!

Carol Knepp

For Special
Little Ones

DBG Trustee
Susan Sheridan



Christmas at the Ice House

Enthusiastic members of the Garden Club of Denver and some trustees of Denver Botanic Gardens are busy making arrangements for over a dozen holiday table settings to be displayed December 4, 5 and 6 at the Ice House, located one block north of Union Station. "Christmas at the Ice House," a benefit for Denver Botanic Gardens and Historic Denver Inc., affords the public an opportunity to see some world-renowned designers' showrooms, not usually open to anyone but the trade.

Kneedler-Fauchere, Stroheim & Romann, Herbert Mathew LTD, Kinney Wallcoverings, Jack Lenor Larsen, J.E.H./Denver (representing Scalandre Fabrics) and Thomas H. Grant are some of the distinguished tenants in the Ice House. Built in 1903 and formerly the cold-storage facility for Beatrice Foods, this landmark was restored by Frank Allen, Baird & Warner, Inc. and Dana Crawford who was honored for her Larimer Square and Oxford Hotel projects.

The Ice House is now on the National Register of Historic Places, so designated by the National Trust, an outstanding contribution to Denver's historic preservation effort. These showrooms, plus the remarkable table settings, will inspire the discriminating collector of home furnishings and antiques this Christmas season. Tickets are

available this month for \$5 at King Soopers locations or by calling 534-1858 or 298-9191.

Mrs. Warren Sheridan, DBG Board member and Garden Club of Denver volunteer, works with fresh fruit, roses and gerbera daisies for a centerpiece, arranged in a mid-Victorian Austrian crystal fruit compote. Mrs. Sheridan also uses sterling silver salt and pepper shakers as miniature vases in front of each setting. Her "Christmas Dinner" table is uniquely elegant by its display of a pair of 18th century carved beechwood Italian angels, a pair of French Empire bronze and alabaster figurines and a pair of ormolu and bronze figural candleholders, circa 1820. Her china is Royal Worcester and her wine glasses are 19th century gold-rimmed Baccarat. The furniture is courtesy of Thomas H. Grant in the Ice House.

George W. Kelly Honored for Landscaping Contributions

George W. Kelly received the "Jane Silverstein Ries Award" on September 26 at the Colorado Chapter of the American Society of Landscape Architects' Annual Banquet. This award is presented each year to honor a person, group or organization who has pioneered "a sense of awareness and stewardship of land use values" in the Rocky Mountain region.

Mr. Kelly has demonstrated that contribution through his long-term guidance and dedication to the education and practice of Rocky Mountain horticulture. He directed the development of the Gardens during the formative years of the early 1950s until the selection of the first permanent director. He was the *Green Thumb Magazine's* first editor and has written 10 books on horticulture including *Rocky Mountain Horticulture*. He has done much as a pioneer of Colorado horticulture, especially in promoting water conservation and creative landscaping.

Denver Botanic Gardens congratulates George W. Kelly and thanks him for his outstanding contributions.



George W.
Kelly by O.
Miniclier

Design Your Own Botanical Cards

Tuesdays, November 11, 18, 25
(three sessions)

9:30 to 11:30 a.m. Classroom B

Have you ever longed to design and send handmade holiday or note cards? This is your chance to get organized and do just that.

In this class, students will draw holiday greens, cones and flowers from the Gardens on their own Christmas cards. Please bring rulers, erasers, practice paper, pens, pencils, watercolors and brushes, colored pencils and/or markers for your prettiest and most personal cards ever. Beginning and advanced students will be provided with a dozen cards and envelopes to illustrate. Instructions will be given to those students who wish to have their designs printed.

Instructor: Angela Overy received her National Diploma of Design from London University, England and designed in London, New York and San Francisco before settling in Denver. Over the years, many DBG students have found a new interest and ability in her lectures and classes.

Fee: \$29 members/\$32 non-members (includes a \$5 materials fee).

Limit: 20

Starlings, Sparrows and Squirrels to Spare?

Wednesdays, December 3, 10
6:30 to 9 p.m. Classroom C

Are you a little bored with the same humdrum assortment of wildlife that visits your yard? Would you like to see at least an occasional chickadee or woodpecker? Come and find out about bird feeders, bird baths and bird houses as well as the best locations for them.

Learn which native Colorado trees, shrubs and wildflowers can be planted around your house to attract birds and other animals. The native plants discussed will strongly emphasize water conservation and Denver's climate. Proper vegetation can help you create a wildlife oasis. Wouldn't butterflies and humming-birds enhance your garden?

Instructor: Tina Jones is a wildlife instructor who teaches at the University of Colorado, the Denver Museum of Natural History and Denver Botanic Gardens. She is an active birder with many years of field experience.

Fee: \$20 members/\$22 non-members

Holiday Grapevine Wreath Workshop

Monday, December 1
9:30 a.m. to noon Classroom B

Create a masterpiece to enjoy from year to year. Each student will receive a 14-inch grapevine wreath to decorate as they see fit. Choose from a wide assortment of plant materials such as baby's breath and dried proteas plus interesting pods and smaller cones. Make it all-natural or enliven it with little birds or artificial fruit, all carefully selected by the instructor. Develop your own color scheme and finish it off with a perfect bow!

Please bring wire cutters and scissors.

Instructor: Avalonne Kosanke is a master flower judge for the National Council of State Garden Clubs and has over 25 years of teaching experience. She is a talented and very capable designer whose efforts are evident throughout the Gardens.

Fee: \$32 members/\$35 non-members (includes \$20 for materials).

Limit: 15

Holiday Centerpiece Workshop

Tuesday, December 2
9:30 a.m. to noon Classroom B

Make a very personal, rich-looking centerpiece to grace your dining room table for the holidays. Using a favorite container or compote, students will use all kinds of seasonal greens (including holly and magnolia or camellia leaves) to create an arrangement that will be ready for candles. Choose from many kinds of materials including some for special accent and color. Besides being inexpensive, learning to do it yourself is both enjoyable and relaxing.

Please bring clippers, scissors or knife and an appropriate, non-silver container (tin, glass or ceramic).

Instructor: Avalonne Kosanke

Fee: \$22 members/\$24 non-members (includes \$12 for materials).

Limit: 15



CLASSES

Fall
1986
Denver Botanic Gardens



Basketry Workshop: Twill-lidded Basket

(one session)

9 a.m. to 5 p.m. Morrison Center

Section I: Friday, November 7

Section II: Saturday, November 8

Please indicate your section on the registration form.

This basket will hold your letters, shoes or gloves in neat order. It can easily be made larger or smaller. The basket itself is woven in a straight twill, while the lid is a point twill creating a diamond shape on top.

Bring a towel, sharp knife or garden shears, awl, clothespins and sack lunch.

Instructor: Robin Taylor Daugherty

Fee: \$30 members/\$33 non-members (includes \$10 for materials)

Limit: 12

Christmas Ornaments from Straw and Wheat

(one session)

Section I: Sunday, November 16

Section II: Saturday, December 6
11 a.m. to 4:30 p.m. Classroom B

Please indicate your section on the registration form.

Come and learn how to make ornaments from straw and wheat, a craft many Scandinavians do each winter for the holiday season. You will make snowflakes, wreaths, horses, angels and various other unusual tree ornaments. The fee includes wheat for the six or seven ornaments that will be made in class as well as some to take home for others.

Please bring a ruler, scissors and a sack lunch to class.

Instructor: Maureen McGowan

Fee: \$25.50 members/\$28 non-members (includes a \$5.50 materials fee).

Limit: 15



Advanced Christmas Ornaments from Straw and Wheat

(one session)

Saturday, December 13

10 a.m. to 3:30 p.m. Classroom B

This workshop is for students who have attended any of the straw or wheat classes offered at Denver Botanic Gardens. New techniques of braiding and plaiting will be taught and participants can expect to complete five or six different ornaments for their holiday tree. Projects include an angel, bell and a five-pointed star.

Please bring a ruler, scissors and a sack lunch to class.

Instructor: Maureen McGowan is a horticultural instructor and consultant who has taught various craft classes, including wheat weaving, at the Chicago Botanic Gardens and DBG.

Fee: \$25.50 members/\$28 non-members (includes a \$5.50 materials fee).

Limit: 15

Christmas Ornaments from Reed

(one session) Morrison Center

Tuesday, December 2

Section I: 12:30 to 4 p.m.

Section II: 6:30 to 10 p.m.

Please indicate your section on the registration form.

Learn to make two or more ornaments from basketry materials. Unbreakable and unique, they add a "country" look to your holiday decorations.

Bring a towel, clothespins, kitchen or garden shears, awl, tape measure and white glue.

Instructor: Robin Taylor Daugherty is a fiber artist with considerable teaching experience; she has taught weaving, spinning, felting, tapestry-making and basketry throughout Colorado and her work is exhibited widely.

Fee: \$20 members/\$22 non-members (includes a \$6 materials fee)

Limit: 12

Basketry Workshop: Accent Basket

(one session)

9 a.m. to 4 p.m. Morrison Center

Saturday, December 6

Make two slightly different wall hung baskets in one day. They will make wonderful, quickly made presents. Fill them with dried or silk flowers, wooden spoons, candles, fireplace matches ...

Bring towel, kitchen or garden shears, awl, tape measure and a sack lunch.

Instructor: Robin Taylor Daugherty

Fee: \$27.50 members/\$30.25 non-members (includes \$10 for the construction of two baskets).

Limit: 12

Denver Botanic Gardens
909 York Street
Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses are given subject to a minimum enrollment of ten students. For further information, please call 575-3751.

Registration Form for Classes and Field Trips

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Address _____

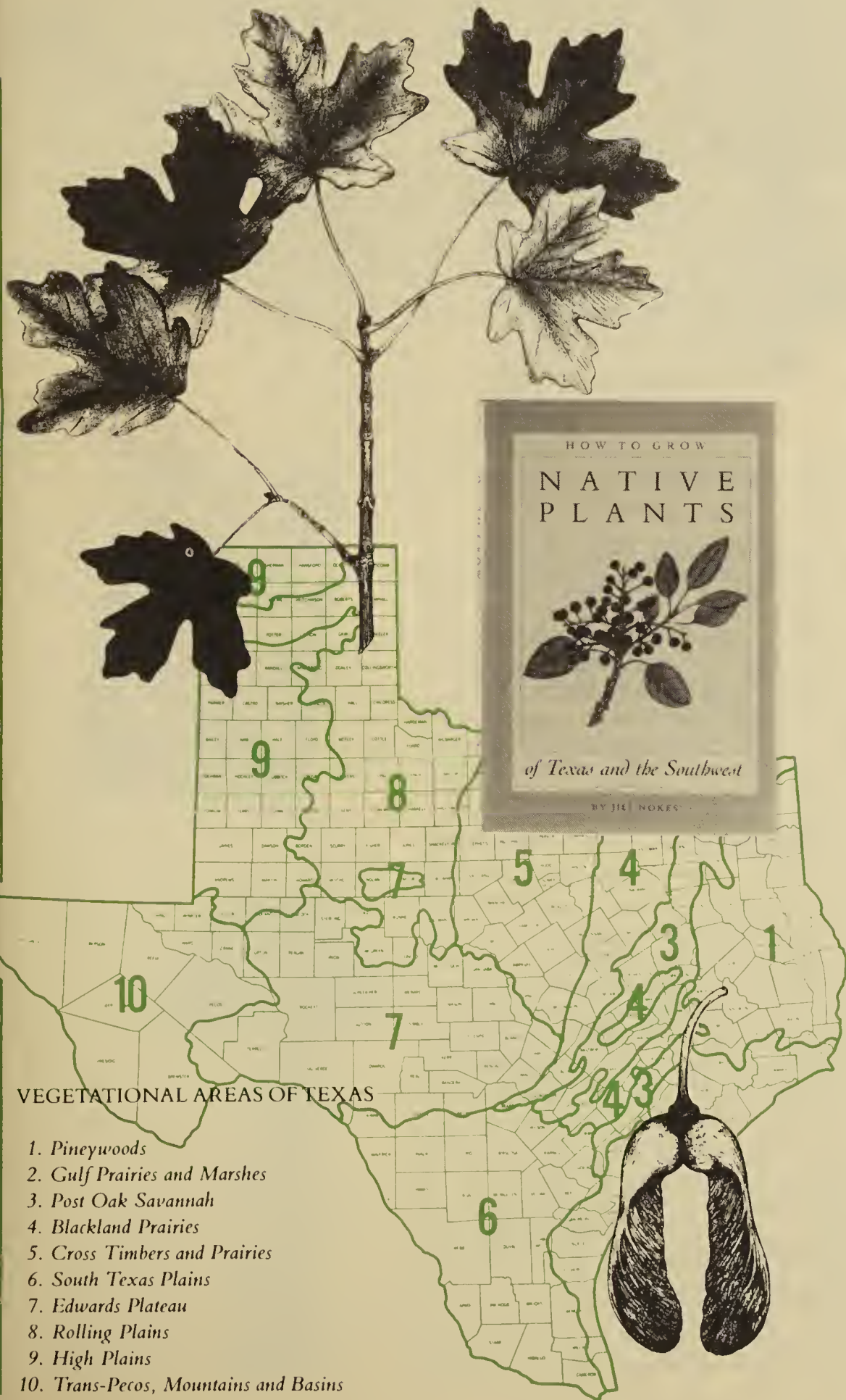
City _____ State _____ Zip _____

Home Tel. No. _____ Business Tel. No. _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No

Helen Fowler Library
Volume 9, No. 5
November 1986

Librarian:
Solange
Gignac



How to Grow Native Plants of Texas and the Southwest

By Jill Nokes. Texas Monthly Press, Inc., Austin, Texas, 1986. \$26.95. SB 439 N65 1986

Many myths exist when it comes to growing native plants in Texas and the Southwest. People think of native plants as thorny, bushy, unattractive and hard to grow. Jill Nokes, in her book, *How to Grow Native Plants of Texas and the Southwest*, presents an impressive case to dispel such notions. Her book is geared toward the interested layperson as well as the professional nurseryman, grower or landscape designer.

It is a very thorough guide for growing over 350 species of native trees, shrubs and woody vines. Information on each species includes a general description of the plant's flowers and fruits, habitats and preferred sites, collection, storage and propagation plus some of Ms. Nokes' personal notes. In addition, she provides some general information on natives, specifically, how to gather, store and germinate seeds, as well as how to plant, transplant and propagate native plants.

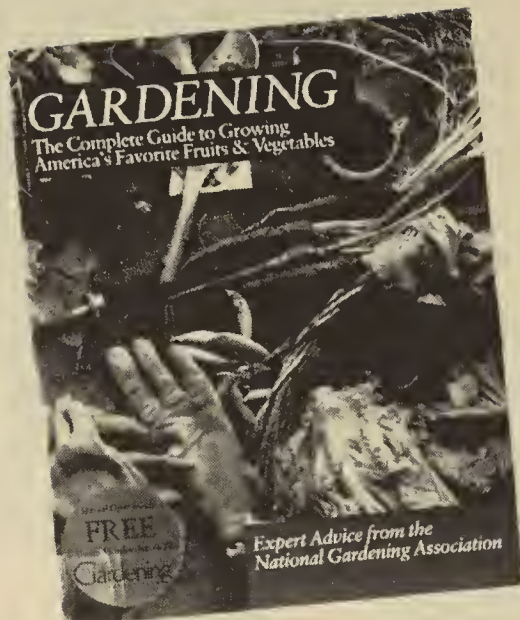
A section of color line drawings is perhaps the only disappointment in this book. The drawings do not picture the plant as a whole. Although her descriptions of the plants are done well, a line drawing of the plant's overall growth habit would have been extremely useful to accompany each description. This would have been beneficial to the layperson as well as the professional. When considering a plant for landscaping, drawings and pictures are well worth their space.

Catherine Hoyt

THE REVIEWERS

Catherine Hoyt—
1986 Summer Intern

John Verbiscar—
Library
Volunteer



Gardening

By the National Gardening Association, Addison-Wesley Publishing Company, Inc., Reading Massachusetts, 1986. \$19.95. SB 320.6 G36 1986

The book's title may be simple and unassuming, but its subtitle, *The Complete Guide to Growing America's Favorite Fruits and Vegetables*, aptly describes the contents. It must be one of the most complete guides around. Compiled from the knowledge and experience of more than 135 gardeners in the National Gardening Association, it represents a wealth of gardening know-how. Since it entails a broad source of reference, it does not espouse any one correct way to garden. So, one has a variety of tried and true methods from which to choose. (Did you know there are four methods of thinning carrots? See page 119.)

Organization of the material is broken into planning, preparation, planting, care and harvesting on a general basis and specifically for each vegetable, berry and fruit in alphabetic order. Vegetables are in one section, berries and fruits in another followed by a section of resources that lists sources for vegetable seeds, oriental vegetables, fruit trees, seed exchanges and more.

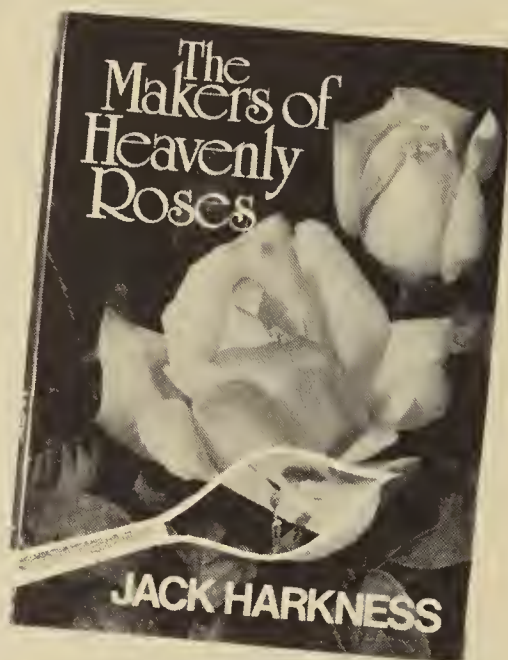
Chock-full of information as this book is, the editors had to use margins for additional tips in order to highlight them. One of the desirable features is the listing of possible varieties for each fruit, berry and vegetable discussed. The book doesn't push any one variety, but makes options available.

The photography is excellent. I suspect that looking at those delectable pictures in January could create some insatiable desires.

Unfortunately, the section on herbs (found in the section on vegetables) is too brief. Only 10 are dealt with, presumably the favorites. Why only 10? Who's to say rosemary isn't also one of America's favorites?

This is a book that one can pick up again and again and always to discover some new information. If you have room for only one gardening book on your bookshelf, consider this one. For \$19.95 it really is a good value.

John Verbiscar



The Makers of Heavenly Roses

By Jack Harkness. Souvenir Press, London, 1985. \$29.95. SB 411.4 H37 1985

In his book *The Makers of Heavenly Roses*, Jack Harkness, an internationally known rose breeder, presents the fascinating biographies of 17 rose breeders and their families (including himself at the insistence of his publishers). The stories include historical details, frustrations and failures of these breeders.

This book puts the reader in the time and place of the people involved. The characters and innovations of these famous rose breeders becomes evident and personalized. The breeders included in this book have fair claim to fame and their names now garnish many of our best-loved roses.

The breeders are varied in their lifestyles, specializations and attitudes toward nature and beauty. The book is both educational and enjoyable to read.

Catherine Hoyt

Amanita of North America

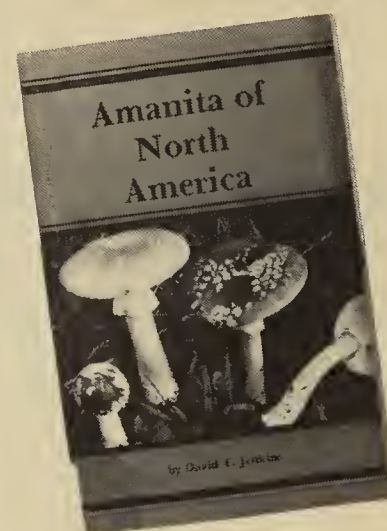
By David T. Jenkins. Mad River Press, Inc., Eureka, California, 1986. \$33.95. QK 617 J45 1986

Amanita of North America by David T. Jenkins is a comprehensive source for the identification of the known members of the genus *Amanita*. A thorough description of the genus precedes a sectional key to eight sections. These keys separate the genus into over 120 species and varieties. Most mushroom books include only a fraction of this number of amanitas.

Descriptions of individual species thoroughly cover known taxonomic information regarding the pileus, gills, stem, pileipellis, gill and stem tramas, subhymenium, basidia, spores, volva and annulus. In addition, habitat, toxicity and distribution are reported.

Over 75 species and varieties are pictured in a separate section of the book. The photographs are not as impressive as many other mushroom books on the market. However, in dealing with the amanitas, the written description is far more valuable as photographs can be highly misleading.

Catherine Hoyt





*Tea House
in Winter*

November is here and the leaves are off most of the plants except for the Burkwood viburnum. It has about 25% of the leaves remaining and they are still green. Is it possible that if I relocate this plant to a more protected area, it might stay green throughout the year? I'll jot the thought down so that next spring I will remember to transplant it.

My records over the past several years have been quite helpful. I notice that in the colder months of winter some of my junipers turned bronze, others turned blue and one became a dull green. I prefer those that provide enjoyable color throughout the year. Maybe in spring I'll look for a replacement. My notes through January reflect that none of the shrubs I purchased for wildlife has fruit on them in midwinter. In fact, the fruits were gone by November. I need to replace these with plants whose fruits are less delicious when food is plentiful and more attractive when food is not as available. It is interesting that in February I noticed that the stem colors of a few trees and shrubs were different from other times of the year. The purple and red coloration is not only found in leaves, but also stems and buds. This seemed most apparent in the American linden and boxelder maple. I would have never noticed these subtleties had I not started to observe, record and evaluate the

plants. Last year I noticed my willow had red buds and wine-colored stems. And to think I initially bought it for its bluish foliage. I'll use these this year for indoor decorations.

It was in early April last year that I brought the forsythias in to force. The year before I didn't bring them in until the latter part of the month. Weather conditions were warmer and the plants were two weeks earlier. After reviewing my records for the past years, I noticed the species iris has been blooming in alternate years. I'll have to mark the areas and interplant them. Also, the ground cover in the same area struggled. This year, to be safe, I'll provide a mulch for winter protection.

The last several winters have been dry ones. Records that I have kept from the last three years have shown that although the problems have been similar, the trees and shrubs have not suffered while other plants struggled. I will treat them the same this coming winter, if similar conditions prevail.

So far, spring has been my most successful endeavor. There is a sequence of bloom and an excitement that always goes along with the reawakening of plants. I must do the same for the other seasons. I know that certain annuals will just not do. Last year I tried

lavatera and they went to seed in early August, leaving a large opening in a very special gardening spot. I haven't been as diligent on my records for summer displays and have made several mistakes. This year, I will turn over a new leaf and be more observant.

The summer months somehow sneak in quickly and dealing with plants takes on a different tone. Pests are truly pests and most frustrating ones. Records have helped me anticipate problems and act before they became real issues. Keeping track of the weather has also kept me alert to know when and what to do and use.

One other record I started two years ago was monitoring how much I watered certain areas. Anticipating that meters are going in, I need to have a better understanding of how much water an area really requires.

I never realized it, but I have a laboratory in my backyard. Taking notes and gardening somehow now go hand in hand. I enjoy observing my plants, reading my notes, reflecting on the past and being creative. Next year I must plant bulbs, cover the mums, thin out the shrubs, ... How about you?

Gayle Weinstein
Botanist Horticulturist at
Denver Botanic Gardens

CALENDARS

Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

African Violet Society, 4th Thurs. of 7 months; *Bonsai Society*, 1st & 3rd Tues.; *Cactus & Succulent Society*, 2nd Tues.; *Civic Garden Club*, 1st Fri.; *Colorado Native Plant Society*, 4th Wed.; *Gloxinia Gesneriad Growers*, 1st Sat.; *Hemerocallis Society*, 3rd Sun. of 4 months; *Ikebana International*, 4th Fri.; *Iris Society*, spring & fall dates; *Men's Garden Club*, 4th Thurs.; *Mycological Society*, 2nd Mon.; *Orchid Society*, 1st Tues.; *Rock Garden Society*, 3rd Wed.; *Rose Society*, 2nd Thurs.; *Ultra Violet Club*, 4th Mon.; *Water Garden Society*, 2nd Sun. of 5 months

Coming Next Month

December 1
Holiday
Wreath
Workshop

December 2
Christmas
Ornaments
from Reed,
Centerpiece
Workshop

December 3
Starlings,
Sparrows and
Squirrels to
Spare?

December 4-6
"Christmas at
the Ice House"

December 5, 6
Basketry
Workshop:
Accent Basket

December 6
Christmas
Ornaments
from Straw
and Wheat

December 12
"Heralding the
Season"

December 13
Advanced
Christmas
Ornaments
from Straw
and Wheat

December 14-
January 17
"Blossoms of
Light"

December 14, 21
High Tea

December 25
Christmas—
Gardens Closed

Denver Botanic Gardens, Inc.
909 York Street
Denver, Colorado 80206
303-575-3751

November 1986

TIME VALUE

Address correction requested



S	M	T	W	T	F	S
2	3 Tempel Wildflower Lecture	4	5	6	7 November 7-9 "Botanical Treasures: A Show and Sale"	8 1 Watercolor and Mixed Media Painting, Basketry Workshop: Miniature Baskets
9	10	11 Design Your Own Botanical Cards	12	13	14	15
16 Christmas Ornaments from Straw and Wheat	17	18	19	20	21 Holiday Gift Shop Sale	22 Holiday Gift Shop Sale
23	24	25	26	27 Thanksgiving— Gardens Open	28	29
<div> <div> <p>December 1 Holiday Wreath Workshop</p> <p>December 2 Christmas Ornaments from Reed, Centerpiece Workshop</p> <p>December 3 Starlings, Sparrows and Squirrels to Spare?</p> <p>December 4-6 "Christmas at the Ice House"</p> </div> <div> <p>December 5, 6 Basketry Workshop: Accent Basket</p> <p>December 6 Christmas Ornaments from Straw and Wheat</p> <p>December 12 "Heralding the Season"</p> <p>December 13 Advanced Christmas Ornaments from Straw and Wheat</p> </div> <div> <p>December 14- January 17 "Blossoms of Light"</p> <p>December 14, 21 High Tea</p> <p>December 25 Christmas— Gardens Closed</p> </div> </div>						

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NEWS

Second Annual "Blossoms of Light" Features Tea with Dickens

A Dickens Christmas will be celebrated at Denver Botanic Gardens this holiday season. From December 14 through January 17, the Gardens will be adorned with antique sleighs, lights and Simpich character dolls on display and for sale.

The indoor decorations will be done by United Floral Industry of Colorado and, of course, Larry Latta and the Horticulture Under Glass team. Outside, the trees along Linden Allé and surrounding the amphitheater will sparkle with tiny white lights. A members' preview of "Blossoms of Light" will be the traditional Heralding the Season event on Friday, December 12.

United Bank of Cherry Creek is providing funds for additional lights for 14-16 more trees and to keep the Gardens open in the evening between Christmas and New Year's Day. On December 26 through December 30, DBG will be open from 5 to 8 p.m.

The Dickensian theme will be carried through with High Tea served on Sunday evenings, December 14 and 21, from 5 to 8 p.m. Waiters in Victorian costume will serve tea and typical English fare, while musicians entertain.

Children will be delighted by the Simpich marionettes brought to life by David and Debbie Simpich. The originators of the Simpich characters, Bob and Jan Simpich, will also be on hand to chat with the guests.

Musical groups include the Brass Quintet from the Denver Chamber Orchestra, Plymouth a capella

continued on page 8

For Members Only

*"Herald the Season"
Page 5*



Inside:

*Great
Getaways
page 6*

*Classes for
Adults page 9*

*Classes for
Kids page 10*



*1986 Holiday
Lobby Court
Display*

Information
Desk Volunteer
Ivy Fails
investigates the
voodoo lily,
*Hydrosme
rivieri*



The Greening of Denver

Idea solve your Christmas table setting and holiday decorations by attending the festive "Greening of Denver" benefit on Friday and Saturday, December 5 and 6 at The Ice House, 1801 Wynkoop. A dozen imaginative table displays and Christmas floral arrangements will heighten your anticipation of the approaching holiday season. The \$5 ticket gives you the unique opportunity to gain access to this new design facility, only accessible to licensed interior decorators.

In addition to the table settings, six small boutique tables will offer a tantalizing selection of Christmas presents and decorations.

The Tattered Cover will have a choice selection of gardening books and The Chocolate Truffle will tempt the shopper with all things chocolate.

Look for a selection of Victorian Christmas ornaments, books about Denver and children's toys from the Molly Brown Gift Shop and the shop at Four Mile House. The Botanic Gardens' Gift Shop will feature carefully selected items to intrigue the gardener; this booth will offer a few very fine gardening books, posters and stationery. The Lark will be on deck with hose guards, faucet turn-ons, stone animals, bird feeders, ornaments, surprise balls and more. Finally, Melissa's Catering will offer coffee, tea, cookies and croissants for the weary shopper.

A joint benefit for Denver Botanic Gardens and Historic Denver, Inc., tickets are available at the Botanic Gardens' Gift Shop, the Molly Brown House, 1340 Pennsylvania and metropolitan-wide King Soopers.

Giving in 1986

Yes, there is tax reform! The changes in the tax laws can affect your charitable gifts this year, helping you save more as you give. The new tax law will impact deductions for non-itemizers and taxes on capital gains, to name just a few.

People give to their favorite charity for many reasons, only one of which is a possible reduction in taxes. If you are considering a substantial charitable gift, 1986 is the year for you to take advantage of savings that will no longer be available. Check with your tax advisor; a gift this year may be economical.



Tributes

In memory of James R. Arneill, Jr.

Mr. & Mrs. John C. Mitchell II

In memory of Lee J. Ashley

Dr. William G. Gambill, Jr.

In memory of Mrs. Sidney Brock, Jr.

Perennial Garden Club

In memory of John W. R. Crawford

Mr. & Mrs. John C. Mitchell II

In memory of Paul B. Keck

Cindy Nibbelink, Andrea & Stephanie Keck

In memory of John C. Murphy

Mr. & Mrs. Ralph Rauscher

In memory of Kimberly Uhlig

Fran Regner

In memory of Charles VanBuskirk

David & Lois Ferguson



Green Thumb News

Number 86—12 December 1986

Published monthly by the Denver Botanic Gardens Education Department, 909 York Street, Denver, Colorado 80206, and edited by Patricia A. Pachuta and Carolyn Knepp. Subscription to this newsletter is a benefit of membership in the Botanic Gardens. For membership information, please write the Membership Department at the above address or call 575-3751.

Deadlines for this newsletter are: Major news stories, feature material (including photographs or artwork), and short notes are all due not later than November 20 for January, December 19 for February and January 19 for March.

Please plan in advance and meet deadlines. Late material cannot be used. Stories must be typed, double-spaced, preferably on copy paper provided by the editor. Please call the Education Department at 575-3751 for details.



1987 Summer Intern Program

"The past ten weeks undoubtedly represent the finest professional training I have encountered thus far in my life," remarked an intern who worked at Denver Botanic Gardens during the summer of 1986. Applications are now available for the 1987 program that begins on June 15 until August 21.

Participation in the Summer Intern Program offers students an opportunity to experience a variety of activities associated with the fields of botany and horticulture. They will work with DBG's professional staff and volunteers on a daily basis to help maintain an urban public display garden. Work assignments are completed in most departments of the Gardens including the Conservatory, Outside Grounds, Library and Education department. Typical duties range from watering to weeding.

To qualify, applicants must have completed their sophomore year of college with a grade point average of at least 2.5 on a scale of 4.0 and must be currently enrolled as either an undergraduate or graduate student. Several introductory courses in botany and horticulture are pre-requisites. A taxable stipend of \$2,000 will be paid to each intern for the ten-week term.

All application materials are due March 1, 1987 and notification of appointment will be mailed by March 27, 1987.

Application forms and additional information can be obtained by writing:

Patricia A. Pachuta
Education Director
Denver Botanic Gardens
909 York Street
Denver, CO 80206

A 1986 intern stated that, "Much of what I have learned could not have been attained in the classroom," and this important practical experience is the primary goal of the program. What a great way to develop expertise and become a true professional!

Index Available to 1986 Green Thumb Magazine

Members interested in receiving a copy of the index to Volume Forty-three are requested to write to the Membership Department of Denver Botanic Gardens, 909 York Street, Denver, Colorado 80206 before December 31, 1986.

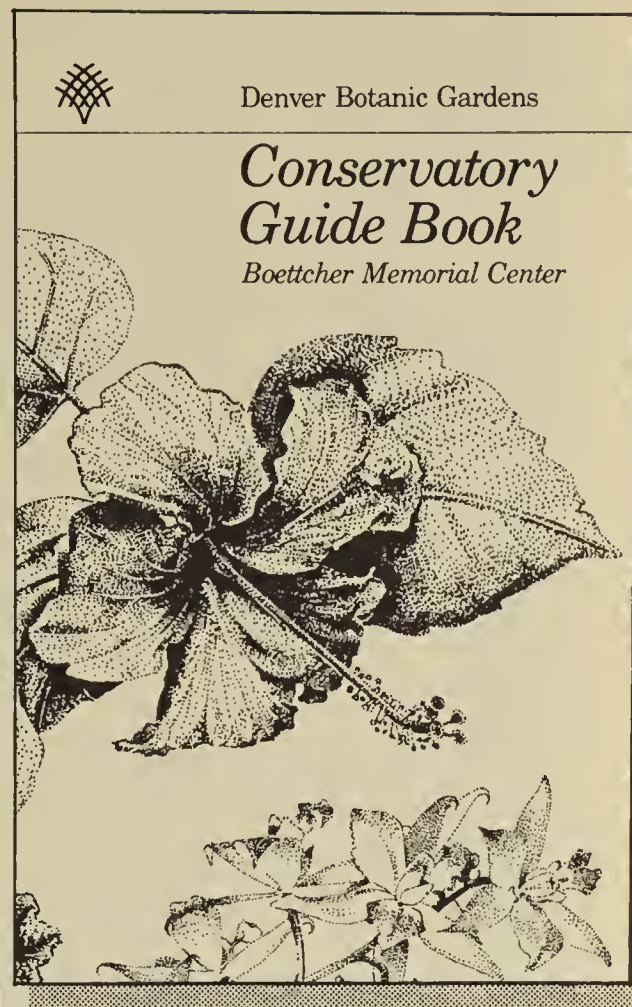
New Conservatory Guidebook Has Arrived!

Long overdue but well worth the wait, the newly revised guide to Denver Botanic Gardens' Boettcher Memorial Conservatory will soon be in the mail for each member. Hot off the press, this guide is the Winter issue of *The Green Thumb* magazine, Volume Forty-three, Number Four. Bring it along the next time you visit to fully appreciate our tropical collections.

The format differs slightly from the previous publication. Although basically still a walking tour coded to specifically labeled plants, brief discussions of ten major plant families or groups such as succulents are also included.

It is beautifully illustrated with many line drawings by Paula Nicholas and is easily worth its \$1 fee.

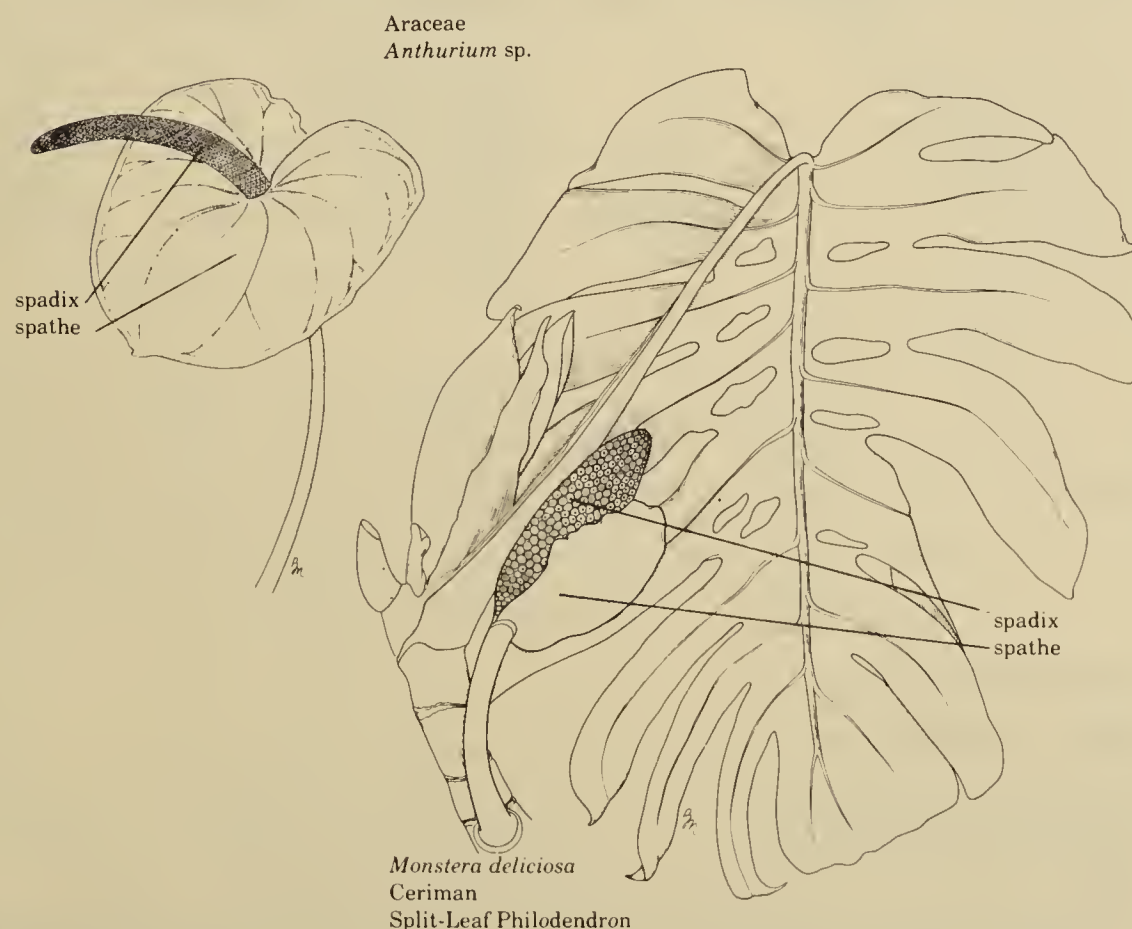
The diligent efforts of a committee chaired by Assistant Director Andrew Pierce and members Peg Hayward, Larry Latta, Beverly Nilsen, Patricia Pachuta and Janet Wingate are responsible for the project.



The Arum, or Aroid Family: Araceae

The true arums from which the family inherits its common name inhabit the seasonally moist forest floors and bogs of Europe, but the most familiar members of the family are the tropical ones, many of which have become common as houseplants: philodendrons, dieffenbachias (dumb canes), spathiphyllums and anthuriums. (A mark of their familiarity is the fact that their genus names have entered our vernacular.)

The floral characteristics that distinguish them as a family are the spadix, a fleshy central stalk on which are arranged the tiny male and female flowers, and the spathe, a petallike modified leaf which more or less encloses the spadix.





Spread Holiday Cheer Throughout the Year— Give a Denver Botanic Gardens Membership

Student (full-time)	\$18	Family/Dual	\$35
Senior (65 or over)	\$18	Contributing	\$50
Senior Couple (two; 1		Supporting	\$100
seniors living at; 1		Advocate	\$300
same address)	\$25	Patron	\$500
Individual	\$25	Benefactor	\$1,000

Donor's Name _____

Address _____

City _____ State _____ Zip _____

Recipient's Name _____

Address _____

City _____ State _____ Zip _____

Date to Mail Gift Card _____

Gift Card to be Signed _____

Recipients receive a card informing them of your gift, plus a free plant that may be picked up at the Gardens

Please send to Denver Botanic Gardens, 909 York Street, Denver, CO 80206

Holiday Greetings

In appreciation for your support of Denver Botanic Gardens in 1986, the staff would like to wish you Happy Holidays and the best that the New Year can bring.

Merle M. Moore, executive director
 Ron Albright, carpenter I
 Hattie Arita, cashier
 Jim Borland, plant propagator
 Nancy Brittain, director of development
 Peggy Brown, orchid intern
 Judy Carrier, horticultural therapist
 Mary Jo Christenson, clerk typist III
 Corliss Curtis, plant records clerk
 Gary Davis, gardener florist II
 Benito Delgado, maintenance worker
 Julie Dulapa, horticultural assistant
 Frank Garcia, gardener florist I
 Leslie Garcia, assistant librarian
 Solange Gignac, horticultural librarian
 Syd Glick, membership secretary
 Mike Greene, gardener florist II
 Virginia Hayman, clerk II
 Diana Hunt, marketing coordinator
 Kathy Johnson, assistant librarian
 Bea Jones, clerk
 Kai Kawahara, Japanese garden specialist
 Panayoti Kelaidis, Rock Alpine curator
 Carol Knepp, education assistant
 Selma Kristel, assistant librarian
 Gordon Lackey, utility worker I
 Larry Latta, botanist-horticulturist
 Sondra Lobato, administrative assistant III
 Richard Martinelli, gardener florist II
 Bob Mascareñas, utility worker I
 Ron McLellan, Conservatory gardener
 Judi Muller, accountant I
 Joann Narverud, grounds foreman
 Ruth Nielsen, cashier I
 Mark Nieto, utility worker II
 Beverly Nilsen, botanist-horticulturist
 Bill O'Hayre, gardener florist II
 Gene Osborne, cashier
 Patricia A. Pachuta, education director
 Charles Paxton, Chatfield superintendent
 Andrew Pierce, assistant director
 Fran Regner, development secretary
 Alan Rumpeltes, maintenance repairman I
 Vicki Rumpeltes, account clerk
 Lynn Thompson, community gardens coordinator
 Joe Tomocik, gardener florist II
 Karen Trout, greenhouse gardener
 Gayle Weinstein, botanist-horticulturist
 Jan Wingate, taxonomist



***Members are Invited to
Herald the Season
at Denver Botanic Gardens
Friday, December 12, 1986
from 7 to 9 p.m.***

Come and preview "Blossoms of Light." Outdoors, our trees will twinkle with thousands of tiny lights. Indoors, our Christmas tree will be decorated and cascades of white poinsettias will bloom amid antique sleighs. Handmade Simpich character dolls will be displayed in holiday settings. Stroll the Conservatory and enjoy refreshments.

7 p.m. Holiday Puppet Show and Marionette Display for the Wee Ones

8 p.m. Choral Music

John C. Mitchell II Hall

*Reservations Please, by December 9
355-3456*



Asparagus
plantation
workers' camp
at Mount
Kinabalu,
Sabah, by Merle
M. Moore

University of Colorado to Host Tropical Rainforests Conference

The University of Colorado will host a conference on tropical rainforests February 5-8, 1987. Entitled, "Tropical Rainforests: Strategies for Wise Management," the four-day meeting will bring together many of the world's leading rainforest experts to discuss ways of better managing this irreplaceable resource.

Keynote speakers will be Davis Brower of Earth Island Institute and Catherine Caulfield, author of *In the Rainforest*. Other speakers include Ghilleen Prance of the New York Botanical Garden, Bruce Rich of the Environmental Defense Fund, Judy Gradwohl of the National Zoological Park and Shelton Davis of the Anthropological Resource Center.

Among the topics to be addressed are: biological diversity, indigenous peoples, international consumerism, climatic effects, international lending policies and the impact of economic activities such as cattle ranching, colonization and dam building.

The goal of the conference is to educate participants on the problems of rain forest management and to provide a context for policy solutions and outlets for activism.

"Tropical Rainforests: Strategies for Wise Management" is sponsored by the University of Colorado Environmental Center, the Kuja Sni Research Group, the CU departments of Biology, Geography and Anthropology, the Rainforest Action Network and the New York Botanical

Garden.

Individual registrants will be charged \$15 per day or \$30 for four days and representatives of organizations will be charged \$30 per day or \$60 for four days.

For additional information, please contact the CU Environmental Center, UMC 331, Campus Box 207, University of Colorado, Boulder, Colorado, 80309 or call them at 492-8308.

Great Getaways: The Mountain Flowers of France and Spain

Friends of Denver Botanic Gardens who want to know where it rains mainly in Spain may find out for themselves this summer on our fabulous tour to the mountains of northern Spain. (The academic answer to that question is that it rains on some mountains but not on others. But you'll have to go along to learn which ones!)

Led by Allan Taylor and Pat Pachuta, the tour will begin approximately June 15 in Madrid, going directly to the Sierra de Guadarama to botanize the high slopes. Next, two entire days will be spent on the lovely alpine heights of the Picos de Europa section of the Cantabrian Mountains of the Biscay coast. From there our party will move on to the Basque country of the

western Pyrenees, stopping at the famed prehistoric Caves of Altamira along the way. Nearly two weeks will be spent in the high valleys and on the peaks of the Pyrenees in Spain, France and Andorra. All of the renowned flowers of these mountains—lilies, narcissi, orchids—will be in bloom on the high meadows and at the edges of the melting snow.

There will be much to enjoy besides scenery and flowers, however, from ancient cities such as Segovia and Carcassonne to chic modern cities such as Madrid and Barcelona. Several spas on the northern slopes of the Pyrenees are also on the route. The trip promises to be a fascinating package of countryside and city, of neolithic sites and modern museums, of elegant hotels and haute cuisine.

The cost of the 21-day tour will be approximately \$4,000. Included are airfare and virtually all land costs: ground transportation by tour bus, lodging and most meals. Accommodations will usually be in first class hotels, though some nights in the mountains will be in more rustic premises.

It is not too early to begin planning to be a part of this once-in-a-lifetime tour of one of the most scenic areas of Europe. There is space for only 15, so don't be left out by waiting too long.

Additional information may be obtained by calling DBG Assistant Director Andrew Pierce at 575-3751, extension 18.

Conservatory Guide Training Program Begins January 13

Denver Botanic Gardens is unique. Denver and the surrounding cities offer wonderful parks for people to enjoy, but due to the climate of the Front Range, displays of exotic plants are limited. Trips to greenhouses allow students opportunities to see unusual plants in four-inch pots. But nowhere else except at the Gardens can students see an actual rubber tree that is 50 feet tall.

Students from schools in the metropolitan area visit the Gardens on a regular basis as an extension of the classroom experience, and a group of volunteers guide these enthusiastic tours through the "jungle." In 1985 several thousand adults and school-age children were led through the Gardens by our elite core of volunteer guides.

A series of classes will begin on Tuesday, January 13 and run through Tuesday, March 13 from 9:30 to 11:30 a.m. in Classroom A. In this ten-week program future guides will obtain an orientation to the Gardens and our collection of plants, an introduction to basic botany and tips on how to lead educational tours. Class size is limited and advance registration is necessary. To register for classes use the Education department registration form in this newsletter. A \$25 fee will be refunded after 40 hours of touring.

New guides can attend continuing education classes that are scheduled



throughout the year for the guides. After 40 hours of volunteering they are able to attend a class in the Education department at no cost other than the materials fee. The guide program has an active group that meets frequently so anticipate making new and interesting friends while providing a valuable service to the community.

The need for guided tours is an ever-increasing demand that we hope you will consider helping the Gardens meet. For additional information call the Education department, 575-3751, extension 20.



Conservatory Guide Dick Schwendinger leads a group of Denver-area teachers



Participant in
the 1986
Scarecrow
Contest

The Great Pumpkin at Republic Plaza

The Great Pumpkin came to Republic Plaza October 17. The Botanic Gardens and Republic Plaza Retailers hosted an Oktoberfest celebration during lunch hour, 11:30 to 1 while a German band played and people strolled around the Plaza admiring the pumpkins that the tenants of Republic Plaza had entered in the carving contest. Graystone Investments won the creative competition with their "stockbroker pumpkin" and the Ladd Corporation won the carving competition with their "cat pumpkin."

The highlight of the celebration

was the pumpkin recipe judging with prizes from Denver Botanic Gardens. Five finalists chosen from over 35 entries waited in anticipation as their recipes were judged by Noel Cunningham, head chef of Strings restaurant; Kristin McCloskey, reporter from KCNC-TV; and Pat Miller, the "Gabby Gourmet" of KLSC. Finally, after a difficult task, Elizabeth Durfee's pumpkin soup with roasted green chiles and creme fraiche emerged as the winner. The grand prize was two season tickets to the 1987 Gardens Concert Series. Here is Mrs. Durfee's recipe for your holiday enjoyment:

Pumpkin Soup with Roasted Green Chiles and Creme Fraiche

One medium sweet pumpkin (if sweet pumpkin is not available, add one yam or sweet potato.)

1 large onion, chopped

2 green chiles

3 tablespoons unsalted butter

Approximately one quart chicken stock

Cayenne, salt, Cajun Magic, cilantro

Preheat oven to 350 degrees. Cut pumpkin into quarters and scoop out the seeds. Place in a baking dish with one-half inch of water in bottom. Cover with foil and bake one hour.

While the pumpkin is baking, roast the green chiles over a low flame until the skin becomes brown and blistered. Wrap them in a damp cloth to loosen the skin. Instead of roasting, the chiles can be placed on a cookie sheet and baked in a 475 degree oven until the skin is brown. After they have

cooled, remove the skin and dice into small pieces. Set aside.

Sauté chopped onion in butter in a large saucepan until soft. Allow the pumpkin to cool and remove its skin, chop coarsely and place in a food processor with the onions and stock. Process until smooth.

Place the mixture in a saucepan and bring to a simmer. Add diced chiles and season to taste with salt, Cajun Magic and cayenne. Put a dollop of creme fraiche (recipe follows) in the middle of a serving bowl and sprinkle with chopped cilantro.

Creme Fraiche

1 cup heavy cream

1 cup dairy sour cream

Twenty-four hours beforehand, whisk heavy cream and sour cream together in a bowl. Cover and let stand in a warm place overnight, or until thickened. Refrigerate for a minimum of four hours.



Second Annual "Blossoms of Light"

continued from page 1

singers and groups from several local high schools. Performances and teas are scheduled hourly at 5:15, 6:15 or 7:15. Music will be in John C. Mitchell II Hall and the Conservatory.

Tickets for each of the two evenings of High Tea are \$12 for adults and \$5 for children 6-12. They may be purchased through the Development Office at 909 York Street or at United Bank of Cherry Creek in Ptarmigan Center at Colorado Boulevard and Cherry Creek Drive North, during business hours starting December 1 through December 19. Or, fill out the adjacent form and mail it with your check and self-addressed and stamped envelope by December 5 to:

Denver Botanic Gardens
"Blossoms of Light"
909 York Street
Denver, CO 80206

Participation is limited to 150 people per scheduled performance and tea serving for each High Tea. Tickets will be available at the door *only* if the event is not sold out.

"Blossoms of Light" High Tea Reservation Form

Name _____

Address _____

City _____ State _____ Zip _____

Daytime phone _____

Amount enclosed: \$_____ for _____ adult ticket(s) at \$12 each
_____ children ticket(s) at \$5 each

Check One: December 14 ____ or December 21 ____

Check One: ____ 5:15 Tea and Performance

____ 6:15 Tea and Performance

____ 7:15 Tea and Performance

Grass Identification

Saturdays, January 10, 17, 24, 31
February 7, 14

(six sessions) 1 to 3 p.m.

DBG's Kathryn Kalmbach
Herbarium (located upstairs
above the Library)

The grass family, Poaceae, is one of the largest of all plant families and is of great economic importance to man. Such staples as corn, rice, wheat, barley and oats are all grasses. Over 300 species of grasses are found in Colorado, dominating the vegetation in many areas.

This class is oriented to give those with little or no knowledge of grasses an understanding of grass morphology and the skill to identify grasses using botanical keys and guides. Students will study numerous native and naturalized grasses in Colorado.

Two booklets prepared by the instructor will be used: *A Simple Guide to the Common Colorado Grasses* and *Keys to the Grasses of the Colorado Front Range*. These may be purchased in class. Don't forget your hand lens.

Instructor: Janet L. Wingate, M.S. and Ph.D. in botany from the University of Oklahoma, is currently on the DBG staff working in the Kathryn Kalmbach Herbarium. She is an avid field botanist with much teaching experience.

Fee: \$48 members/\$53 non-members

Limit: 14

Starlings, Sparrows and Squirrels to Spare?

(one session)

Wednesdays, December 3, 10
6:30 to 9 p.m. Classroom C

Are you a little bored with the same humdrum assortment of wildlife that visits your yard? Would you like to see at least an occasional chickadee or woodpecker? Come and find out about bird houses as well as the best locations for them.

Learn which native Colorado trees, shrubs and wildflowers can be planted around your house to attract birds and other animals. The native plants discussed will strongly emphasize water conservation and Denver's climate. Proper vegetation can help you create a wildlife oasis. Wouldn't butterflies and humming-birds enhance your garden?

Instructor: Tina Jones is a wildlife instructor who teaches at the University of Colorado, the Denver Museum of Natural History and Denver Botanic Gardens. She is an active birder with many years of field experience.

Fee: \$20 members/\$22 non-members



DBG staff members Jan Wingate and Rick Brune

Christmas Ornaments from Straw and Wheat

(one session)

Section II: Saturday, December 6
11 a.m. to 4:30 p.m. Classroom B

Come and learn how to make ornaments from straw and wheat, a craft many Scandinavians do each winter for the holiday season. You will make snowflakes, wreaths, horses, angels and various other unusual tree ornaments. The fee includes wheat for the six or seven ornaments that will be made in class as well as some to take home for others.

Please bring a ruler, scissors and a sack lunch to class.

Instructor: Maureen McGowan

Fee: \$25.50 members/\$28 non-members (includes a \$5.50 materials fee).

Limit: 15

Holiday Grapevine Wreath Workshop

Monday, December 1
9:30 a.m. to noon Classroom B

Create a masterpiece to enjoy from year to year. Each student will receive a 14-inch grapevine wreath to decorate as they see fit. Choose from a wide assortment of plant materials such as baby's breath and dried proteas plus interesting pods and smaller cones. Make it all-natural or enliven it with little birds or artificial fruit, all carefully selected by the instructor. Develop your own color scheme and finish it off with a perfect bow!

Please bring wire cutters and scissors.

Instructor: Avalonne Kosanke is a master flower judge for the National Council of State Garden Clubs and has over 25 years of teaching experience. She is a talented and very capable designer whose efforts are evident throughout the Gardens.

Fee: \$32 members/\$35 non-members (includes \$20 for materials).

Limit: 15

Christmas Ornaments from Reed

(one session) Morrison Center
Tuesday, December 2

Section I: 12:30 to 4 p.m.

Section II: 6:30 to 10 p.m.

Please indicate your section on the registration form.

Learn to make two or more ornaments from basketry materials. Unbreakable and unique, they add a "country" look to your holiday decorations.

Bring a towel, clothespins, kitchen or garden shears, awl, tape measure and white glue.

Instructor: Robin Taylor Daugherty is a fiber artist with considerable teaching experience; she has taught weaving, spinning, felting, tapestry-making and basketry throughout Colorado and her work is exhibited widely.

Fee: \$20 members/\$22 non-members (includes a \$6 materials fee)

Limit: 12

CLASSES

Fall
1986
Denver Botanic Gardens





Holiday Centerpiece Workshop

Tuesday, December 2
9:30 a.m. to noon Classroom B

Make a very personal, rich-looking centerpiece to grace your dining room table for the holidays. Using a favorite container or compote, students will use all kinds of seasonal greens (including holly and magnolia or camellia leaves) to create an arrangement that will be ready for candles. Choose from many kinds of materials including some for special accent and color. Besides being inexpensive, learning to do it yourself is both enjoyable and relaxing.

Please bring clippers, scissors or knife and an appropriate, non-silver container (tin, glass or ceramic).

Instructor: Avalonne Kosanke

Fee: \$22 members/\$24 non-members (includes \$12 for materials).

Limit: 15

Basketry Workshop: Accent Basket

(one session)
9 a.m. to 4 p.m. Morrison Center
Saturday, December 6

Make two slightly different wall hung baskets in one day. They will make wonderful, quickly made presents. Fill them with dried or silk flowers, wooden spoons, candles, fireplace matches . . .

Bring towel, kitchen or garden shears, awl, tape measure and a sack lunch.

Instructor: Robin Taylor Daugherty

Fee: \$27.50 members/\$30.25 non-members (includes \$10 for the construction of two baskets)

Limit: 12

Advanced Christmas Ornaments from Straw and Wheat

(one session)
Saturday, December 13
10 a.m. to 3:30 p.m. Classroom B

This workshop is for students who have attended any of the straw or wheat classes offered at Denver Botanic Gardens. New techniques of braiding and plaiting will be taught and participants can expect to complete five or six different ornaments for their holiday tree. Projects include an angel, bell and a five-pointed star.

Please bring a ruler, scissors and a sack lunch to class.

Instructor: Maureen McGowan is a horticultural instructor and consultant who has taught various craft classes, including wheat weaving, at the Chicago Botanic Gardens and DBG.

Fee: \$25.50 members/\$28 non-members (includes a \$5.50 materials fee).

Limit: 12



Just for Kids

Tree Trimming Party

(one session) Classroom A

Section I : For children of
ages 4-5
Saturday, December 6
1 to 2:30 p.m.

Section II: For children of
ages 6-7
Saturday, December 6
3 to 4:30 p.m.

Please indicate your section on the registration form.

Make traditional decorations with popcorn and cranberries as well as some new kinds to decorate one of the Gardens' trees for our city-dwelling birds and squirrels. Learn the story of the *tannenbaum* and why the early Romans exchanged tree branches to celebrate the new year.

Take home some of your creations to add to your own backyard tree.

Instructor: Karen Hostetter studied outdoor education at Earlham College and science education at the University of Texas. Formerly curator of education at the Heard Natural Science Wildlife Sanctuary, she is an experienced teacher.

Fee: \$6.50 members/\$7 non-members

Limit: 12

Peppermint Parade

(one session) Classroom B

Section I : For children of
ages 4-5
Tuesday, December 16
4 to 6 p.m.

Section II: For children of
ages 6-7
Thursday, December 18
4 to 6 p.m.

Please indicate your section on the registration form.

Bundle up, we're all going outside to see "Blossoms of Light." The Gardens will be decked out in its holiday finery and we're going to look at everything from our sparkling trees to our antique sleighs.

Inside, we'll enjoy hot chocolate and candy canes and listen to some legends and stories of the holiday season. Discover the flower of the Aztec Kings and take one home to share with your family.

Instructor: Carol Knepp is education assistant at Denver Botanic Gardens as well as an enthusiastic tour guide.

Fee: \$8 members/\$9 non-members

Limit: 12

Gardening Tips for December

Blooming plants and fresh flower arrangements during the holiday season make the snowy outdoors seem far away. At this time of year the variety of flowering plants available offers a multicolored choice.

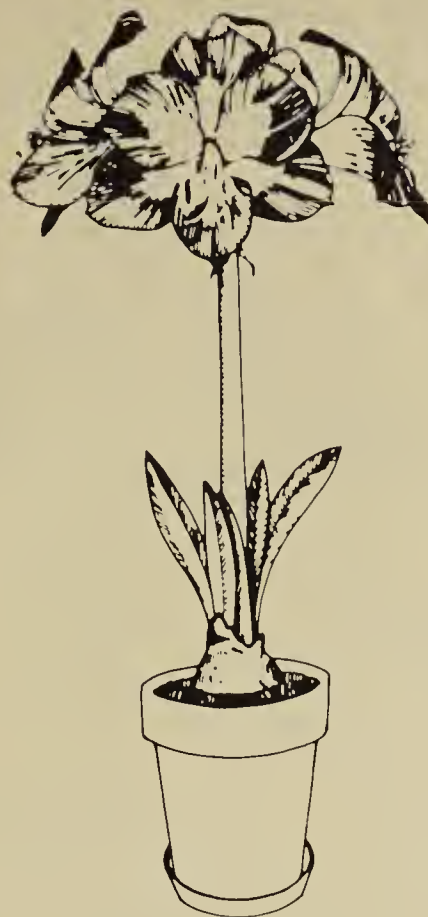
Lately, many hybrids of *Kalanchoe blossfeldiana* have been produced resulting in blossoms of clear yellow, soft peach, deep orange and orange-red in addition to the traditional bright red flowers usually associated with this succulent plant. It enjoys cooler temperatures and can tolerate rather dry soils. Once its heavy blooming period is over, try starting new plants from cuttings since the older plant does not bloom as prolifically the second year.

The burst of beauty of the amaryllis (*Hippeastrum* spp.) certainly brightens any setting. And what a flashy attention-getter it is! If its height on a table seems a bit awkward, try snuggling it up to an end table or try placing it in a sunny hallway. Later, when the blooms are gone, the plant can be grown outdoors and brought inside in the late summer for a period of total dormancy before stimulating the new growth for next winter's flowers.

The shy, back-turned cyclamen blossoms have much appeal. They may be found in white, pinks, reds, mauve and purple. Some have attractive blotches of deeper color at the inner edge and the heart-shaped leaves may also have colorful patterns.

The tubers of this plant prefer cool and moist conditions that may not be easily duplicated in many of our warmer, dry homes but the charm of seeing a cyclamen in full bloom is surely worth the effort of trying to find a suitable location.

Probably the most important cultural tip to keep flowering azaleas in good condition is to water them



thoroughly. The entire soil ball is best watered by soaking until the air bubbles stop rising. Cooler temperatures will prolong the blooming period and health of azaleas grown indoors.

Poinsettias are probably the most prominent of all of the holiday plants. The decorative bracts are now available in several new color ranges in addition to the all-time favorite of red or scarlet. There are pink ones; and white with pink blotches; or red with pink spots; or all white with greenish tints.

You can find them in short, little plants with just a few blooms or in various sized pots with many flowers. There are even spectacular hanging baskets of poinsettias to add a dramatic dash of color to a sunny window. Keeping these plants too wet can cause early leaf drop, just as keeping them bone dry will. But, if a regular light drying out is followed by a good, deep soaking they will remain attractive for months. And, here

again, slightly cooler temperatures will help keep the plant in good condition.

With proper treatment, cut poinsettia blossoms will last for a month or longer in a winter arrangement. Because of their size, only two or three flowers might be needed to do a lovely design. Cut each stem and burn the end with the flame from a candle until the stem edges sear and bubble. Then, place the stems in very warm water. If a stem needs to be shortened more for correct placement in the design, be sure to sear it again at that point.

In general, cool growing conditions and attentive watering will keep many of the holiday plants sold at this time of year attractive and healthy. Producing flowers from year to year, however, is more involved; for specific information on such factors as dormancy and daylength requirements, consult the Helen Fowler Library.

Joan Franson

(Mrs. Franson is an active volunteer and instructor at Denver Botanic Gardens; her special interests are roses and flower arranging.)



Denver Botanic Gardens 909 York Street Denver, Colorado 80206

Fees for courses should be paid in advance by check or money order made out to Denver Botanic Gardens. Since the space is limited in many courses, registration should be mailed in promptly. Your registration will NOT be acknowledged. Your name will be placed on the class list the day your money is received. No enrollments for class by phone please. All courses given are subject to a minimum enrollment of ten students. For further information, please call 575-3751.

Registration Form for Classes and Field Trips

The enclosed check, in the amount of _____, is to cover the registration fees for the following classes:

Name and section of classes _____

Name _____

Address _____

City _____ State _____ Zip _____

Home Tel. No. _____ Business Tel. No. _____

Member of Denver Botanic Gardens? ☐ Yes ☐ No

COLORADO

Regular Meetings of Plant Societies

A number of plant and horticultural groups meet fairly regularly at the Denver Botanic Gardens. Here is a listing of those groups and a general indication of when they usually meet. For more specific meeting times and locations as well as for information on how to contact a representative of the group, please call the Botanic Gardens switchboard during business hours at 575-3751.

African Violet Society, 4th Thurs. of 7 months; *Bonsai Society*, 1st & 3rd Tues; *Cactus & Succulent Society*, 2nd Tues.; *Civic Garden Club*, 1st Fri.; *Colorado Native Plant Society*, 4th Wed.; *Gloxinia Gesneriad Growers*, 1st Sat.; *Hemerocallis Society*, 3rd Sun. of 4 months; *Ikebana International*, 4th Fri.; *Iris Society*, spring & fall dates; *Men's Garden Club*, 4th Thurs.; *Mycological Society*, 2nd Mon.; *Orchid Society*, 1st Tues.; *Rock Garden Society*, 3rd Wed.; *Rose Society*, 2nd Thurs.; *Ultra Violet Club*, 4th Mon.; *Water Garden Society*, 2nd Sun. of 5 months

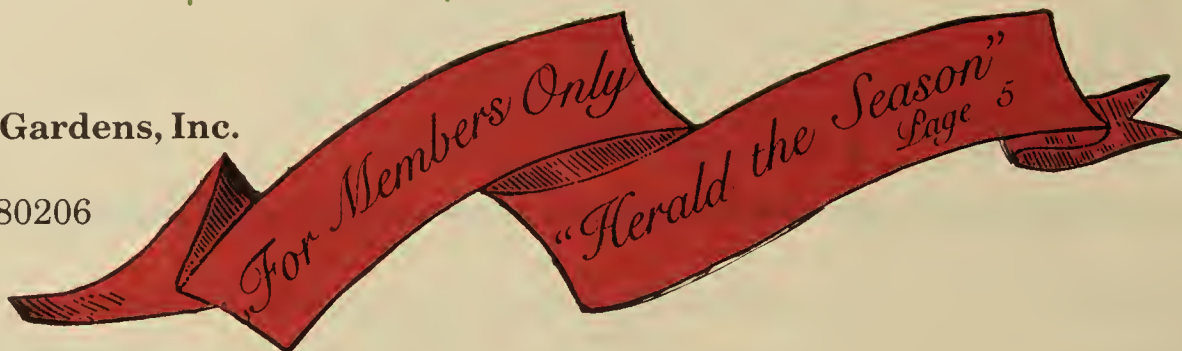
A	L	E	N	D	A	R
S	M	T	W	T	F	S
	1 Holiday Wreath Workshop	2 Christmas Ornaments from Reed, Centerpiece Workshop	3 Starlings, Sparrows and Squirrels to Spare?	4 December 4-6 "Christmas at the Ice House"	5	6 Accent Basket, Ornaments from Straw and Wheat, Tree Trimming Party
7	8	9	10	11	12 "Heralding the Season"	13 Advanced Christmas Ornaments from Straw and Wheat
14 December 14-January 17 "Blossoms of Light"	15	16 Peppermint Parade	17	18 Peppermint Parade	19	20
21 High Tea	22	23	24	25 Christmas—Gardens Closed	26	27
28	29	30	31			
Coming Next Month						
January 1 New Year's Day—Gardens Closed	January 13 Guide Training Class	January 10 Grass Identification				

Denver Botanic Gardens, Inc.
909 York Street
Denver, Colorado 80206
303-575-3751

December 1986

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Address correction requested



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